Baseline Survey on Mental Health Services in Selected Municipal Wards of Kolkata for the Sambandhan – Urban Mental Health Project

Supported by:
Navajbai Ratan Tata Trust, Mumbai

Prepared by:
Jayaprakash Institute of Social Change
DD – 18 / 4 / 1, Salt Lake, Kolkata – 700064

In collaboration with:
Iswar Sankalpa
138, S. P. Mukherjee Road, Kolkata – 700026

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LIST OF ABBREVIATIONS USED

Abbreviations		Full Form
AIDS	:	Acquired Immune Deficiency Syndrome
BPL	:	Below Poverty Line
CMC	:	Calcutta Municipal Corporation
CBO	:	Community Based Organization
CUDP III	:	Community Based Urban Development Project – III
CSIP	:	Care Services Improvement Partnership
CMRI	:	The Calcutta Medical Research Institute
DALY	:	Disability Adjusted Life Year
DMHP	:	District Mental Health Programme
DSM IV-TR	:	Diagnostic and Statistical Manual of Mental Disorders
DOT	:	Direct Observation Treatment
DISE	:	District Information System for Education
ECT	:	Electroconvulsive therapy
FGD	:	Focused Group Discussion
GHQ	:	General Health Questionnaire
HEA	:	Health Education Authority
HIV	:	Human Immune Deficiency Virus
HHW	:	Honorary Health Worker
ICD-10	:	International Classification of Diseases-10
IEC	:	Information, Education and Communication
IIPS	:	Indian Institute of Population Sciences
IPP-VIII	:	Indian Population Project – VIII
ICDS	:	Integrated Child Development Scheme
IUD	:	Intra-Uterine Device for Birth Control
IS	:	Iswar Sankalpa
JPISC	:	Jayaprakash Institute of Social Change
KMC	:	Kolkata Municipal Corporation
KAP	:	Knowledge Attitude Perception
KMA	:	Kolkata Municipal Area
KMDA	:	Kolkata Metropolitan Development Authority
KII	:	Key Informant Interview
MO	:	Medical Officer
MI	:	Mental Illness
MHA	:	Medical and Health Assistant
MTP	:	Medical Termination of Pregnancy
NGO	:	Non-Governmental Organizations
NIMHANS	:	National Institute of Mental Health and Neuro Sciences
NMHP	:	National Mental Health Programme
NVBDCP	:	National Vector Borne Disease Control Programme
NRS	:	Nil Ratan Sirkar Medical College & Hospital

Abbreviations		Full Form
OPD	:	Out Patient Department
PFA	:	People for Animals
PHC	:	Primary Health Care
RNTCP	:	Revised National Tuber Culosis Programme
RCH	:	Reproductive and Child Health
RLA	:	Red Light Area
SD	:	Standard Deviation
SC	:	Scheduled Caste
ST	:	Scheduled Tribe
SSA	:	Sarva Siksha Abhiyan
SSKM	:	Seth Sukhlal Karnani Memorial Hospital
Sq. Km	:	Square Kilometers
SA	:	Situation Analysis
TB	:	Tuberculosis
TU	:	Tuberculin Unit
UT	:	Union Territory
UIP	:	Universal Immunization Programme
WB	:	West Bengal
WHODAS II	:	World Health Organization Disability Assessment Schedule II
WHODAS	:	WHO Psychiatric Disability Schedule
WHU	:	Ward Health Unit
WHO	:	World Health Organization

STUDY TEAM

Composition of Study Team:

Sl. No	Name	Position
1.	Prof. Joydev Mazumdar	Project Director
2.	Dr. Sutapa Guha Roy	Principal Investigator
3.	Ms. Samita Das	Psychologist, Team Member
4.	Ms. Apoorva Bhattacharya	Psychological Counsellor, Team member
5.	Mr. Kaushik Dey	Research Investigator
6.	Ms. Rajashree Khan	Research Investigator
7.	Ms. Priyanka Ray	Research Investigator
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12.	Ms. Soumi Nandy	Research Investigator
13.	Ms. Rina Bhanja Chowdhury	Research Investigator

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1. *Ms. Sarbani Das Roy*, Secretary, Iswar Sankalpa
2. *Dr. Debashis Chatterjee*, Technical Support.
3. *Ms. Laboni Roy*, Psychologist.
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2. *Mr. Arnab Roy*, IAS, Hon'ble Commissioner, Kolkata Municipal Corporation.
3. *Mr. Atin Ghosh*, MMIC, Health, Kolkata Municipal Corporation.
4. *Dr. T. K. Mukherjee*, Deputy C.M.H.O, Kolkata Municipal Corporation
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FOREWORD

Mental health is a positive state of mind engendering a sense of well being that enables a person to function effectively within society. A mental disorder or mental illness is a psychological or behavioral pattern generally associated with subjective distress or disability that occurs in an individual which are not normal. The recognition and understanding of mental health conditions has changed over time and across cultures. Though there are still variations in the definition, assessment and classification of mental disorders, standard guideline criteria are widely accepted. It has been one of the main causes of socio-occupational dysfunction with associated financial drain in both developed and developing countries. Mental disorders are among the top ten causes of disability, worldwide.

In India the need is to provide good quality care to those suffering from mental disorders. But, unfortunately, these efforts are only confined to recommendations. Moreover, there is a misconception that mental illness is low in India. It is unfortunate that even after 65 years of independence, besides having a National Mental Health Programme (NMHP); there is no nation-wide epidemiological data of mental illnesses.

Iswar Sankalpa an NGO launched a unique pilot project for Community Based Care and Support Program for Homeless Mentally Ill in all 141 Wards of Kolkata Municipal Corporation since mid 2007. Primarily it aimed to initiate emergency care and support including treatment for identified population. The project aimed to generate awareness on mental health and to identify mental health needs of homeless population. The project developed linkages between various service providers to evolve strategies to help mentally ill and to establish ground for a sustainable community support in the long run. Iswar Sankalpa wanted to develop a self-sustaining community care model to help these disadvantaged people. In order to develop a self-sustaining community care model on mental health, the organization needed a fair understanding on the nature of the problem, its extent and magnitude, along with support mechanism available to the target population. The organisation, in a bid to consolidate its services, desired to study problems in accessing available services, gaps and challenges in delivering service to the people. The baseline survey was undertaken by Jayaprakash Institute of Social Change, Kolkata in collaboration with Iswar Sankalpa to set certain benchmark based on which the impact of the 'Sambandhan' project will be measured and also to set the benchmark to monitor and evaluate the success of the project interventions.

The study covered five municipal wards of Kolkata Municipal Corporation where the density of slum population is very high. Information was collected from various primary sources like the local people, patients and their family members, service providers – the doctors and social workers of Ward Health Units. The study also reviewed various secondary sources e.g. government reports, policy papers related to mental health published by the Ministry of Health and Family Welfare, Planning Commission, Government of West Bengal and Kolkata Municipal Corporation, other than articles published in various books and journals.

On behalf of Jayaprakash Institute of Social Change, I extend my sincerest thanks to the Iswar Sankalpa for giving responsibility to the Institute to undertake the study on such a sensitive issue. I extend my gratitude to the whole Iswar Sankalpa Team headed by Ms. Sarbani Das Roy,

Secretary for their relentless support and guidance in every stages of the study. I am also thankful to all the Key Informants of various Ward Health Units, who has given valuable information and suggestions to bring forth positive changes in the delivery of mental health services at the community level. We also sincerely thank the people of the studied slums for extending sincere cooperation during the data collection process. I extend my sincerest gratitude to the Hon'ble Mayor of KMC, Mr. Arnab Roy, Commissioner, Mr. Atin Ghosh, MMIC, Health, Dr T. K. Mukherjee, Deputy CMOH, KMC for giving permission to conduct the survey and also in providing administrative support in accessing information from the WHUs. The contribution of Dr. Sudipto Chatterjee, Consultant Psychiatrist, Bangalore needs a special mention for his technical guidance in administering the tools and also in processing of information from the field. I thank the team members of the research unit of Jayaprakash Institute of Social Change who were associated with the study and worked devotedly from the inception till its completion. I convey my special thanks Dr Sutapa Guha Roy, the Principal Investigator of the survey, for her efficient leadership and untiring effort in conducting the survey. We express our deep sense of gratitude to Prof. Jayanti Basu, Department of Applied Psychology, Calcutta University, for her valuable and unconditional support for interpreting WHODAS.

I sincerely hope the study will become an important resource material for planners, researchers, Government officials and other concerned quarters interested to obtain inputs for framing plan and policies for initiating development programmes for the mentally ill persons to ensure their inclusive growth.

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EXECUTIVE SUMMARY

"The mind is its own place, and in itself
Can make a Heaven of Hell, a Hell of Heaven." -- ***John Milton (Paradise Lost)***

By 2015 Kolkata will be one of the four megacities in India having a present population of about 44, 86,679 according to latest census report. The environmental and social impact of unbridled urban expansion had been affecting mental health status and is a cause of concern for public health workers. It is recognized that the urban poor are especially vulnerable to these adverse effects of urbanization. Topics of culture and gender have attracted little interest with reference to mental health policy decisions.

Approaches to the mental health issues in broader social, cultural, and economic contexts, along with clinical experience is inadequate. Changing social values and influence of globalisation require timely interception so that mental health is not affected. A model for effective community mental health programmes requires to be framed.

So research is needed on mental health problems to examine integral feature of psychiatric epidemiology—addressing questions of why, how, and what to do. This study based on both clinical and community settings provided valuable opportunities to find out a broader agenda of mental health care in the present set up in Kolkata slums. The aim was to set up a contextual formulation of a bio-psychosocial model to combat mental health problems. For that the study was conducted in five wards of Kolkata Municipal Corporation. Five wards of KMC namely Ward No. 3, 29, 78, 54 and 82 were selected as the baseline for collection of information from a wide range of respondents which included the mentally ill persons, the service providers in the ward Health Units(WHU) and NGOs. These wards barring Ward No. 82 and 54 had more than 60% of slum population. Ward No. 82 and 54 were selected purposively as Iswar Sankalpa, a mental health organization in the city had been working in this ward for the last three years and their socio-economic relevance.

The focus of the study was to examine the state of mental health care services in Kolkata, considering preventive aspects of mental health and recognizing the socio-cultural factors in mental health services which will pave way to strengthen existing mental health services, through improved access to quality care. The aim was to justify introduction of new kind of services and make the services accessible to the mentally ill persons especially to those who can not afford costly hospitalization exoenses. The improvement in health seeking behavior in the community regarding mental health was the prime target. Moreover, attempts have been made to change perception, awareness and knowledge of mental health in the community.

From each spectrum 200 cases, both male and female, were selected on the basis of non-probability snowball sampling and purposive sampling method. In order to determine prevalence of mental illness among residents of the surveyed area, case vignettes were explained to the community people and according to their reference, cases were identified following snowball sampling method.

This survey highlights the concept of common mental health problems and mental health-related issues among the slum residents. The study examined underlying socio-cultural and psychiatric problems. Moreover, mental health problems had substantial impact on people living with affected person, indicating a hidden burden.

The survey reported a novel approach while designing services and programmes in urban settings for low-income countries. Individually and collectively, the survey aims to address practical and highly relevant issues that mental health policy must address in Kolkata.

The communities and clinics of slums and in middle-class neighbourhoods need to be reoriented for better mental health care service. It is hoped that this report will also clarify an approach to cultural epidemiological research that will be useful in other settings as well.

As the crisis of beds majorly affect the treatment of mental patients so it was found from the study that is an emergency need for increasing beds in Mental Hospitals to accommodate more patients and also to set-up separate wards for rehabilitating them. Moreover proper counseling of the patients relatives are needed so that the mental patients are taken back home once they are fit. Moreover as number of Doctors and Nurses are grossly inadequate for treatment of mentally challenged persons so the government needs to recruit more people for these posts.

The study suggested that government should arrange workshops and training programmes for upgrading knowledge base for planners and administrators along with that for mental health professionals like Psychiatrists, Psychologists, Psychiatric Social Workers, Health workers and other voluntary workers interested in mental health care.

The community awareness drive should be given a priority so that the society looks at the mental health problem from a different angle. IEC materials need to be developed keeping in mind the social, economic and religious background of the target group. Even training of Anganwadi Workers under ICDS on mental health would facilitate early identification and referral of children with Mental Health Problems. Government need to frame a Mental Health Policy for better treatment and rehabilitation of the mentally challenged people.

Facilities for mental health care need to be introduced in all the Ward Health Units. So, people can access proper treatment, both immediate and long term. Since counseling and therapy are integral part of treatment of mental patients, appointment of clinical psychologists and psychological counselors are essential. Training on mental health issues for the health workers/field workers of WHU, Anganwadi workers of ICDS, teachers need to be organized for early identification and treatment of mentally ill persons.

Psychiatry should be given special emphasis in the medical courses so that doctors officers can easily deal with these cases; Right now the syllabus of MBBS deals with psychiatry in a trivial manner, so medicos also neglect the subject and thus have a weak conception on the subject. In service training should be provided to the General Practitioners on mental illness so that they can do early diagnosis and refer them to the hospitals. NGOs Forum is the need of the hour to be formed to facilitate inter agency exchange/sharing of knowledge, experience and expertise.

CHAPTER – I

Evolution of the Concept of Mental Health: Journey from Mental Illness to Mental Health

1. Evolution of Mental Health: From Medical to Bio-Social:

Mental Illness is nothing to be ashamed of, but stigma and bias shame us all. - Bill Clinton

"Not merely the absence of disease or infirmity; but to foster activities in the field of mental health, especially those affecting the harmony of human relations" is the goal of World Health Organization's (WHO) to promote mental health.

Mental health is the most precious possessions we have, which needs to be nurtured, promoted and preserved as best as we can. The state of mind in which an individual experiences sustained joy of life while working productively, interacting with others meaningfully, and faces challenges without loosing the capacity to function physically, psycologically and socially is the cherished level of mental health. It is a vital resource for development of the nation. Absence of it can be a burden to the nation's economic growth and can affect socio-political functioning of the state.

WHO defines mental health as a positive sense of well being encompassing physical, mental, social, basic economic and spiritual aspects of life. Mental health is the barometer of social life of a population. The scope of mental health is not only confined to treatment of some seriously ill persons in psychiatric hospitals but it relates to the whole range of health activities.

A sound mind in a sound body is recognized by WHO, as an ideal for all. Concept of evolution of mental health is linked not only to individual's personality and attitudes, but his relationship with the community and the society he lives, because society has a set of norms. Mental health is controlled both by biological and social factors. It is a fluid state of mind that undergoes fluctuations and thus the capacity of an individual varies.

In middle ages mental illness was seen as demonic possession and for centuries the afflicted were shackled and shunned. All abnormal behaviours were seen as an act of the 'devil' that is, 'against God'. Hallucinations were seen as communications with Satan. The mentally ill patients were considered to be possessed by devils and there were sanctions for punishment. The ill were locked up in jails in an alienated condition in isolated cells. Earlier there was no attempt to view their behaviour from other angles.

But with the advent of modern scientific thought, the focus shifted from 'evil' to 'ill'. This, subtle, but significant shift helped healing of the mentally ill with a human face.

Gradually there had been developments in the understanding of human behaviour. From explanations of supernatural causation, we now understand the state of mind and mental health from a holistic point of view. Rapid advances in understanding human brain along with the dynamics of individual and group behaviour have opened up new vistas for non-medical care givers through wider psychosocial actions to promote mental health.

Mental health is a positive state of mind engendering a sense of well being that enables a person to function effectively within society. A mental disorder or mental illness is a psychological or behavioral pattern generally associated with subjective distress or disability that occurs in an individual which are not normal. Again mental health is not mere absence of mental illness. A mentally healthy person feels comfortable about himself. He has self respect. He is able to shoulder his responsibilities other than taking decisions of his own and solving problems.

The recognition and understanding of mental health conditions has changed over time and across cultures. Though there are still variations in the definition, assessment and classification of mental disorders, standard guideline criteria are widely accepted. It has been one of the main causes of socio-occupational dysfunction with associated financial drain in both developed and developing countries. Mental disorders are among the top 10 causes of disability, worldwide.

French physician Phillippe Pinel in 18th century attempted to forbid use of chains and shackles and removed inmates from dungeons to sunny rooms, but maltreatment of the "ill" patients continued both in Europe and the United States. In 1841, American social worker Dorthea Dix advocated reforms. She protested against housing of mentally ills with criminals, unclothed and against torturing them. In the late 19th century Emil Krapelin distinguished between different types of mental illness varying from manic depressive psychosis, schizophrenia etc.

Clifford Beer in his book 'The Mind that found itself '(1908) described in a significant manner on social consciousness of the community and how to promote better care for the mentally ill. This heralded the era of 'mental hygiene movement' as a major progression from 'illness' to 'wellness' and marked the beginning of the preventive psychiatry movement.

By 20th century, major developments took place in the field of mental health as psychiatry began to make scientific advances. Psychoanalytic therapies were developed by Sigmund Freud, Carl Jung and others. They focused on identity, memory, sexuality and tried to explain that things originated from one's mother.

The remarkable publications of Sigmund Freud led to new concepts of treatment for the mentally ill. He presented behaviour and mental functions as 'understandable' and evolved a coherent theory of personality called 'psychoanalysis'. He gave the world a new conception of both infancy and adolescence, and evolved a system of treatment where the origin of the disease would be revealed.

Freud's contribution changed the focus of mental treatment from 'illness' to 'wellness'. His theory helped to understand behaviour in a better way, as he propounded that behaviour is rooted in childhood experiences and parent-child relationship.

During this period Carl Jung, Alferd Adler, Otto Rank presented variations of the same theme. Psychoanalysis helped to make a giant move to treat mental illness.

B.F. Skinner and J.B. Watson established the 'behavioral therapy', which embodies biological and social theories. It replaced the subjective approach of psychoanalysis. In contrast to intra-psychic theories of psychoanalysis, the behaviour therapy was established as a method of treatment to a various emotional problems.

During the last quarter of twentieth century, there had been a shift to the social origins of mental health and illness. Systematic studies on social roots revealed that illness occur against a background of accumulating life events. For example bereavement causes many mental and somatic diseases. A related aspect to the theory of stress is the topic of 'social support and social networks'. The recognition of social support and available social network has received considerable social attention during the last quarter of 20th century. Studies of persons with neuroses and its relationship to social supports (Henderson et al, 1981, Rasi, 1986) confirmed close association between non-availability of support and coping skills to occurrence of specific mental disorders.

An interesting outcome has been the development of family intervention by psycho-educational programmes and these family interventions have helped to reduce relapses in chronic schizophrenic patients. This added a new dimension to mental health care. A decade ago, researches paved way for new possibilities for intervention and prevention of chronic illness by family interventions replacing complete dependence on drugs.

This area has specific relevance in developing countries particularly in India, because of strong empathy of family bondage and social networks. Till recently, a number of altered states of mind were considered as psychological in origin. Recent evidences (Ervin et al., 1088: Simon et al., 1988) provided insights that explained the states of mind from a biological perspective. These observations established the fact that individual with training and under special circumstances, can function at different levels of the brain organization. These new insights helped in linking the neuro-peptide and psycho

somatic network where the body and mind chatter back and forth using a vocabulary of biochemical (Hall, 1990).

These recent developments contributed understanding a bio-social model for the common mental disorders. The emerging model of vulnerability, destabilization and restoration has practical value in understanding mental disorders as well as treatment of disorders. Notwithstanding the new model of mental disorder which takes into account findings of social psychiatry and molecular biology, no discernible headway could be made due to lack of adequate administrative and financial support specially meant for meeting the needs of mentally ill. Though the bio-social model helped in liberating clinical psychologists, nurses and social workers from the domination of medical profession, corresponding progress, as it was thought of couldn't be achieved owing to lack of resources from society (Goldberg and Huxley, 1992).

1.2. Indian Perspective on Mental Health:

Indian culture has always given due importance to spirituality in life. The term spiritual is not identical with the term mental, though both recognize the value of inner mental life and experiences. In India, health is not confined to physical state. In India health is referred to mental harmony and potential for spiritual growth. Summarizing the contributions made by a number of Indian mental health professional (Wig, 1990,: Neki, 1977: Satyanand, 1966: Vahia, 1973: Ramu et al, 1988), four broad themes can be identified to describe the context of Indian mental health.

Firstly, a rich knowledge base is available in the classical texts of India. Many psychological doctrines and results of modern research have been anticipated and commented upon with great insight by the ancient Indian sages. Upanishads dealt with the problems of consciousness in an analytical manner. Secondly, limitations of the concept of 'dependence-independence' as developmental bipolarity made space for the value of dependence as a concept (Negi, 1975). He pointed out "though independence may be prized as a socio-cultural ideal, as goal of individual development, it is not much cherished. In fact Indian culture tends to foster dependence right from birth". The role of social stress, modernization and occurrence of mental disorders were observed in various studies conducted in different social groups in south India (Kapur, 1976). Similar observations were made by A. Chakra borty (1990) from Kolkata. The third area focused was using psycho-physiological therapy based on the concept of Patanjali for treatment of neurotic and psycho somatic disorders. Growing problem of drug dependence prompted professionals to use yoga and meditation as mode of therapy to prevent drug abuse. The fourth area is family as it provides a cushion to cure all problems. Investigations revealed enduring influence of Indian family and its value in care and support of mentally ill persons (Surya,1970: Narayanan,1977: Bhatti, 1980: Srinivas Murthy, 1991).

In India, families of mentally ill people play a pivotal role in providing care and support. The strong family bond is greatly utilized to provide education and skills, both to facilitate treatment and rehabilitation. However, with the gradual changes in the family structure, there is an emergent need for active consideration of mechanisms and measures to keep the family as an important resource in mental health care. This would require mental health professionals including non-medical workers to put greater need to work with families. Therapeutic care faces a stiff challenge for those who have no family or disowned by the family.

India has a number of public policy and judicial enactments, which have helped to promote mental health. These have tried to address issues of stigma attached to the mental illnesses and rights of mentally ill people in society. A large number of epidemiological surveys in India on mental disorders demonstrated prevalence of mental morbidity in rural and urban areas of the country. These rates are comparable to global rates. Although India is well placed as far as trained manpower in general health services is concerned, in mental health care trained personnel are quite limited and they are mostly city based. Considering this, development of mental health services has been linked with general health services and primary health care. Training opportunities for various kinds of mental health personnel are gradually increasing in various academic institutions in the country.

Recently, there has been some initiative in the growth of private psychiatric services to fill a vacuum that the public mental health services have been slow to address. A number of non-governmental organizations initiated activities related to rehabilitation programmes, human rights of mentally ill people and school for mental health programmes. Despite all these efforts and progress, a lot needs to be done towards improving mental health care in India. Particularly in respect of training, research and provision of clinical services to promote mental health a lot is to be achieved in order to cater to all sections of society.

1.3 Mental Health: Definition and Meaning

The World Health Organization (WHO) defines health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. However, WHO, in the first thirty years (1948-1978), focused largely on specific illnesses (tuberculosis, malaria) and not so much on 'health' (William, 1988:7-23).The Alma Ata conference in 1978, (WHO, 1978) is a landmark in the development of the concept of health. The conference viewed health as an individual's responsibility rather than a service to be delivered to individuals (William, 1988:185).The concept of primary health care (PHC) is revolutionary both in terms of conceptual clarity and details included for achieving the goal.

Normal mental health is difficult to define. There are several models to define *"normality"*.

- Medical model (*normality as health*): Normal health is conceptualized as absence of (psychiatric) disease or psychopathology.
- Statistical model (normality as an average): Statistically normal mental health falls within two standard deviations (SDs) of the normal distribution curve.
- Social Model: A normal person is expected to behave in a socially permissive behavior.
- Process Model (normality as a process): This model views normality as a dynamic and changing process, rather than as a static concept.

1.4 Taboos and Stigmas associated with Mental Illness:

Those without a strong family bondage are often exposed to various forms of discrimination. Mental illness is stigmatized in many ways. A person when diagnosed as mentally ill, then he and his family are isolated from the main stream society. So, often family members have a tendency to hide the disease, fearing ostracization by the society. In Indian society mental diseases are more stigmatized than HIV/AIDS. There are several examples in India where patients were not taken back home from government hospitals or mental asylums after the completion of their treatment and the National Human Rights Commission had to intervene. If there is a mentally ill member in the family then it becomes difficult to arrange marriage for the daughters of the family. Homeless severe mental patients are often termed as "mad". They form a mode of entertainment for others who claim to be normal and sane. Such examples are galore irrespective of socioeconomic status and education.

1.5 Common Human Rights Violations of People with Mental Disorders:

Wang and his team studied mental health treatment data on 84,850 adults in 17 developed and developing countries taken from the World Health Organization's mental health surveys. They found lack of mental health treatment was most severe in less-developed countries. In developed nations roughly half of those with severe disorders do no get care at all. ***MIND***, an organization in United Kingdom reported shocking levels of bullying, harassment and exploitation experienced by people with mental health problems while living in the community.

Two surveys of *Health Education Authority* (HEA) show that many mentally ill patients have suffered discrimination, two-third because of their race and one-third because of their medical history. A report from Turkey's psychiatric hospitals mentioned that patients were subjected to raw electric shock as a form of punishment. Electroconvulsive Therapy (ECT) in these centers' is given without anesthesia to treat a wide range of illnesses in both adults and children. Contrary to the mandate of WHO that mental health care should be available at the community level for anyone who may

need it, but it is observed that there is acute lack of access to basic mental health care and treatment.

Some countries lack adequate services, while in other countries services are available only to certain segments of the population. 32% countries have no community care facilities defined as "any type of care, supervision and rehabilitation of mental patients outside the hospital by health and social workers based in the community". 30% countries don't have a specified budget for mental health care. Only 20% spend less than 1% of their total health budget on mental health.

There are huge regional variations in the number of psychiatrists from more than 10 per 100,000 to less than 1 per 300,000. Worldwide, 68.6% of psychiatric beds are in mental hospitals as opposed to general hospitals or other community settings. Disregarding the WHO mandate, there is often forced admission or treatment of mental ills. It is a common experience that consent is often not sought. People are forced to remain in psychiatric institutions against their will for weeks, months or years. Rights violation of mental patients within institutions is equally appalling. People are locked by rusting metal shackles, chained to beds and subject to other inhumane treatment. Patients are forced to live in filthy living conditions, without clothes, clean water, food, proper bedding or hygienic facilities and kept in seclusion for long period. They are often detained in large institutions, isolated from society far from dear ones of family.

The situation is distressing among vagrants and homeless population. Disowned by families, hapless people roam around in the streets and fall prey to all types of abuse by common men and are also tortured by police. They do not have access to any kind of medical and social support. Instances of sexual abuse of mentally ill women are quite often reported in newspapers. Lack of government support has aggravated the problems of this socially excluded group of population. Significant proportions of homeless persons suffer from diagnosable mental disorders. There is no organized system of mental health care to respond to the needs of the homeless mentally ill persons despite the fact that these persons can be helped by appropriate care. Families in India play an important role by providing dependable support system for persons with disability. Disabled persons falling out of the safety net of the family indicate the failure of the system to provide adequate and constant support to such families.

1.6 Burden of Disease:

The 2001 World Health Report focused on mental health (Mental Health: New understanding, New Hope) with a slogan, “Stop Exclusion: Dare to care”. The report identified that *one person in every four will be affected by a mental disorder at some stage of life*. It points out that Psychiatric disorder is estimated to account for 12% of the global burden of diseases.

The World Bank report (1993) revealed that the Disability Adjusted Life Year (DALY) loss due to neuro-psychiatric disorder is much higher than diarrhea, malaria, worm infestations and tuberculosis if taken individually. According to the estimates DALY's loss due to mental disorders are expected to represent 15% of the global burden of diseases by 2020.

During the last two decades, many epidemiological studies have been conducted in India, which show prevalence of major psychiatric disorder is same all over the world. The prevalence reported from these studies range from the population of 18 to 207 per 1000 with the median 65.4 per 1000 and at any given time. About 2% to 3% of the population suffers from seriously, incapacitating mental disorders or epilepsy. Most patients live in rural areas remote from any modern mental health facilities. A large number of adult patients (10.4 - 53%) coming to the general OPD are diagnosed mentally ill. However, these patients are not given due care as doctors at primary health care units do not ask for detailed mental health history. Thus under-diagnosis, lack of proper investigations and treatments are hindering mental health care.

1.7 State's Response to Mental Health Programme:

Bhore Committee Report, 1946 marked the beginning of mental heath programme in India. A number of mental hospitals were established in between 1947 to 1960. This was followed by general hospitals housing psychiatric unit movement (1960-1975). Since 1975 the community mental health programme had been the thrust area for development of services in India. In this context, mental health professionals have unique opportunity to develop broad based and complete mental health programme utilizing new concept of mental health. The thrust was to involve non-medical mental health professionals and better utilization of family and community as support groups.

At the macro level, Government devised policies regarding welfare measures for housing, urbanization, working women, elderly, environmental degradation etc, which decreases mental morbidity and suffering. The emphasis shifted from medical to bio-psychosocial. The government needs to promote psycho-social interventions in the form of social support.

India is one of the pioneer countries in health services planning with focus on primary health care. Improvement in the health status of the population has been one of the thrust areas for social development programmes in the country. But, a small percentage of the total annual budget is spent on health. Mental health is part of the general health services with no separate budget. The National Mental Health Programme (NMHP) serves practically as the mental health policy. Recently, there was an eight-fold increase in budget allocation for the NMHP for the Tenth Five-Year Plan (2002-2007).

In India mental disorders include schizophrenia, bipolar disorder, organic psychosis and major depression as it affects nearly 2% of population. They need continuous treatment and regular follow-up attention. There are around ten million severely mentally ill in our country without adequate treatment. Lack of knowledge on the treatment availability & potential benefits of seeking treatment are important causes for the above. Moreover with barely one psychiatrist for every 3 lakh population, it turns treatment for the ill into a farce. The psychiatrist/population ratio in rural areas that account for 70% of country's population, could well be under one for every million.

To address this huge burden, National Mental Health Programme was started in 1982 with the following three objectives:

- To ensure availability and accessibility of minimum mental health care for all in the near future, particularly to the most vulnerable sections of the population.
- To encourage mental health knowledge and skills in general health care and social development.
- To promote community participation in mental health service development and to stimulate self-help in the community.

A model delivery of community based mental health care at the level of district was evolved and field tested in Bellary district of Karnataka by NIMHANS between 1986 and 1995. This model was adapted as the District Mental Health Programme (DMHP) and it was implemented in 27 Districts across 22 states/UTs in the Ninth Plan beginning in the year 1996.

During the 10th Five Year Plan, NMHP was realigned and it became from single pronged to multi-pronged programme for effective reach and impact on mental illnesses, main strategies were as follows:

- Expansion of DMHP to 100 districts all over the country.
- Modernization of Mental Hospitals.
- Upgrading Psychiatry wings of Govt. Medical Colleges/General Hospitals.
- IEC Activities.
- Research & Training in Mental Health for improving service delivery.

Currently, the DMHP is under implementation in 123 districts throughout the country. Grants have also been released for up gradation of Psychiatric wings of 75 Government Medical Colleges/General Hospitals and modernization of 26 Mental Hospitals.

During the 11th Five Year Plan an allocation of Rs.1000 crore has been made for the NMHP. A sum of 70 crore has been provided in 2008-09 for implementation of NMHP. During the 11th Five Year Plan, it has been proposed to decentralize the Programme and synchronize it with National Rural Health Mission (NRHM) for optimizing results.

The Mental Health Act, 1987 was another landmark decision to address the legal issues concerning care and rights of the mentally ill. However, there is a large population for whom mental health care is still inaccessible. The need of a growing population and providing accessible, affordable mental health care remains a challenge.

1.8 Poor Implementation of Mental Health Programme in the State:

According to statistics provided by the Health Department of Govt. of West Bengal, there are 375 doctors specializing in mental health, while persons suffering from mental and behavioural disorders are around 60 lakh. About 18 lakh patients suffer from major and severe disorders. There are 1,754 beds in various hospitals (The Statesman, dated 3rd September, 2011). Compared to the number of doctors and nurses available for treatment of mental patients, the patient load is high. Most patients who suffered mental disorders are not taken back to home from the hospitals by their relatives, despite a fit certificate being given to the patient. This increases the patient load at various state-run mental hospitals. Complaints against hospitals for not having requisite supply of drugs for mental patients are also common. Many hospitals do not provide disability certificates to the mentally challenged persons.

The state health officials informed that DMHP is a component of NMHP which started in 1982 in the state. Most services supposed to be carried out by DMHP including awareness generation programme and detection of mentally challenged patients, have been badly hit due to shortage of staff. Number of mentally challenged patients has increased over the years as the programme failed to achieve its goal. According to State Health Department, 6-7% of the population suffers from mental and behavioural disorder. It can be as high as 15% by 2020, if remained unchecked. (The Statesman, 5th September, 2011).

1.9 Need for Mental Health Care services: Implication of SAMBANDHAN Project

Several hurdles had been crossed and a long way trekked in the field of mental health crossing over from 'psychic' to 'socio-psychological', 'biological' to 'bio-social' stages of mental health. Still mental health care is to emerge as an independent discipline. Improvement in the health status of the population is an important precondition to develop India's socio-economic condition. Only a small percentage of total annual budget is spent on health, so mental health is yet to take off in the proper dimension, as it operates under the umbra of general health programmes. In India several lakh people suffer from severe mental illness and more than half of them remain untreated. So, one can easily understand the need and importance of such services.

Lack of knowledge of availability of treatment and benefits of seeking treatment have increased the problem. Kolkata as a metro city with large urban conglomeration, 40% of the population live in slums. The slums lack proper infrastructure to meet the growing

demands of mental health services. Whatever services are available are controlled and managed by private enterprises which remain beyond the reach of the poor people.

Iswar Sankalpa, a noted mental health organization in the city of Kolkata, realized from their field exposure that a large number of mentally ill people who belong to the socio-economically weaker sections of society remain untouched by the services and remain untreated due to their poverty. Moreover, lack of awareness and stigma attached to mental illness ultimately lead them to roam in the streets as wandering mentally ill – lost within and without and civil society brand them as mad. The abysmal conditions of living in the slums coupled with lack of resources and ignorance are making a large population vulnerable to mental illness. This realization has propelled them to launch the project 'SAMBANDHAN' to ensure integration of all resources available to provide cure and care for this forsaken part of our population. The aim is to integrate them with the mainstream society for an inclusive growth of all segments of society.

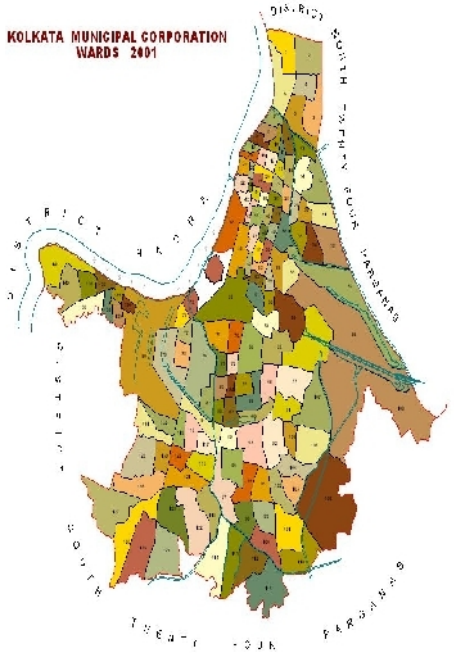
To attain this goal, the project desires to facilitate pro-active functioning of administration, police, judiciary, government hospital, health units, civil society and all other stake holders for creating an effective mechanism based on humanism on one hand and technicalities on the in dealing with any mentally ill person on or off the streets who are largely ignored in the present delivery system. The baseline survey is an effort towards this direction which will help 'Iswar Sankalpa' to consolidate it existing interventions and in devising realistic plan of action for providing accessible and affordable mental health care to all who can not make it by their own.

CHAPTER – II

Description of the Study Area and Existing Health Care Interventions

2. Profile of the City of Kolkata:

Kolkata Municipal Corporation (formerly Calcutta Municipal Corporation), established in 1876, is responsible for the civic infrastructure and administration of the city of Kolkata. The city is divided into 141 administrative wards. This civic administrative body administers an area of 185 sq. km. KMC is headed by the Mayor of Kolkata. Each of these wards elects a member (Councillor) to the KMC. The Corporation groups the wards of the Corporation into Boroughs. Each borough has a committee consisting of the councillors elected from the respective wards of the borough. The Corporation, through the borough committees, maintains government-aided schools, hospitals and municipal markets and partakes in urban planning and road maintenance. The corporation as the apex body discharges its function through the, consisting of a mayor, assisted by a deputy mayor, and ten other elected members of the KMC. The mayor is responsible for the overall functioning of the KMC and has tenure of five years. Another ancillary civic body is the (KMDA) responsible for the statutory planning and development of the (KMA). The KMA includes a large suburban around the urban centres of Kolkata.



The Calcutta Municipal Corporation Act 1980 came into force on January 1984. It extended the boundaries of Calcutta by including the Municipalities of South Suburban, Garden Reach and Jadavpur within Calcutta. The number of wards of the Corporation was raised from 100 to 141.The provisions relating to Bustees were modified. A major amendment was introduced in 1984 to remove certain procedural difficulties in the matters of assessment and valuation of lands and buildings, recovery of taxes etc. Most significant was the introduction of "Mayor-in-Council", with all the attributes of the Cabinet form of government. This was a unique step in the area of Municipal administration in India.

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The Act of 1980 thus formed the framework of the modern Corporation with the Municipal Commissioner as the Principal Executive Officer subject to the control and supervision of the Mayor as the Chief Executive Officer. He is assisted by a group of Senior Civil Officers comprising Joint Municipal Commissioners, Deputy Municipal Commissioners, Chief Engineers, Controller of Municipal Finance and Accounts, Chief Municipal Auditor and Municipal Secretary.

The 74th Constitutional Amendment, 1992 makes provision for appropriate and adequate representation of all elements of society. The Amendment provided reservation of seats for the scheduled castes and tribes and for women. By the same Amendment, the State Legislatures would endow the CMC with the power to draw up plans for economic development and social justice. It was given the responsibility to plan for economic development and for improvement, up gradation and promotion of the social, cultural, educational and aesthetic aspects of life for the citizens of the City.

2.1. Demography

Table: 2.1: Demography:

	Demography		
		1991	2001
Population	Total	4399819	4572876
	Male	2445328	2500040
	Female	1954491	2072836
% Share in State's Population		6.46	5.70
% share of Urban Population (W.B)		100 (27.48)	100 (27.97)
% share of Rural Population (W.B)		0.00 (72.52)	0.00 (72.03)
% share of major religious communities (W.B)	Hindus	80.60 (74.72)	77.68 (72.47)
	Muslims	17.72 (23.61)	20.27 (25.25)
% share of SC (W.B)		6.45 (23.62)	6.01 (23.02)
% share of ST (W.B)		0.20 (5.59)	0.21 (5.50)

% share of Children (0-6) (W.B)		9.57 (16.98)	8.53 (14.24)
Sex Ratio (W.B)	All	799 (917)	829 (934)
	SC	775 (931)	822 (949)
	ST	691 (964)	793 (982)
	Children of (0-6)	955 (967)	927 (960)
Population Density (per Sq. Km) (W.B)		23783 (767)	24718 (903)
Decadal Growth rate (%) (W.B)		6.61 (24.73)	3.93 (17.77)

Education

			1991	2001
Literacy Rate (%) (W.B)	All	Total	77.61 (57.70)	80.86 (68.64)
		Male	81.94 (67.81)	83.79 (77.02)
		Female	72.09 (46.56)	77.30 (59.61)
		Rural	Nil (50.50)	Nil (63.42)
		Urban	77.61 (75.27)	80.86 (81.25)
	SC	Total	56.53 (42.21)	70.54 (59.04)
		Male	63.51 (54.55)	77.25 (70.54)
		Female	47.25 (28.87)	62.26 (46.90)
	ST	Total	55.41 (27.78)	76.39 (43.40)
		Male	64.30 (40.07)	83.66 (57.38)

Gender Gap in Literacy (W.B)	9.85 (21.25)	6.49 (17.41)
	Primary	Upper Primary
No of Schools-SSA-2006	1445 (Govt)	918 (Govt/Govt aided)
Pupil - Teacher Ratio(Govt)-SSA-2006 (W.B)	33.59 (45.20)	39.08 (61.41)
Net Enrolment Ratio(overall)SSA 2006 (W.B)	99.04 (98.03)	92.20 (78.74)
Drop-out Rate(Cohort study SSA 2004)(W.B)	48.55 (19.92)	28.59 (29.70)

Health

Infant Mortality Rate of W.B (2004)	Infant Mortality Rate of W.B (2004)	Infant Mortality Rate of W.B (2004)
Infant Mortality Rate (2001)	Infant Mortality Rate (2001)	Infant Mortality Rate (2001)
Life Expectancy (2001) (W.B)	Life Expectancy (2001) (W.B)	Life Expectancy (2001) (W.B)
Mean age at Marriage (IIPS-2004) (W.B)	Mean age at Marriage(IIPS-2004) (W.B)	Mean age at Marriage(IIPS-2004) (W.B)
Beds per lakh of population(2003)(W.B)	Beds per lakh of population(2003)(W.B)	Beds per lakh of population(2003)(W.B)

Employment

	2001		
Work Participation rate (W.B)		Male	Female
	Rural	0.00 (54.1)	0.00 (20.9)
	Urban	58.1 (53.7)	12.8 (11.6)
% of Main worker	Rural	0.00 (45.8)	0.00 (9.1)

(W.B)	Urban	55.5 (50.2)	11.3 (9.2)
% of Marginal worker (W.B)	Rural	0.00 (8.3)	0.00 (11.8)
	Urban	2.5 (3.6)	1.5 (2.4)
Administrative Information			
No of Municipal Corporation(2003		1	
No. of Wards (2003)		141	
No. of Police Stations		54	
Area (Sq. Km.)		185	
No. of Family Welfare Centres		39	

2.2. KMC Health Services:

Table: 2.2: KMC Health Services:

Infrastructure	Services	Remarks
Ward Health Unit **M.O. - 1** **MHA - 4** **Health Sarkar - 1** **Field Worker - 4**	Immunization Control of Malaria Acute Diarrhoeal Disesses etc. To care for various Health problems & Complains	122 at present functioning Available M.O. MHA - 115 Health Sarkar - 76 Field Worker - 517
Malaria Clinic - 136	Detection & Treatment of Malaria	As per NVBDCP guidelines
Leprosy Clinic(every Thursday) - 67	Diagnosis & Treatment of Leprosy	
Chest Clinics - 10	Diagnosis & Treatment of TB cases as per RNTCP guidelines	56 microscopy & 175 DOT centres are working under different TUs
Analytical Laboratory	Testing of Food samples Testing of water samples	KMC employees who are science graduates with chemistry have been selected through examination, duly trained and deputed to work as FIs in different Boroughs
Routine Immunization Centres - 100	Routine Immunization every Wednesday as per UIP guideline	
Dispensary-38+2	Treatment of common minor ailments	
Dog Pound	Catching stray/rabid dogs with NGOs - PFA & Love n Care	7 Dog catching Van with instruments and trained personnel
Slaughter House-4	Slaughtering of large & small animals, pigs, sheep, goats etc.	
Burning Ghats-7		Have 6 Pollution Control device

Infrastructure	Services	Remarks
Burial Grounds-7		
MTMTB Hospital (150 Bed)		
Ambulance Section	Vehicle - 14	
Maternity Homes - 4		
Health Projects of KMDA integrated with KMC	CUDP III, CSIP, IPP VIII Health Projects for promoting RCH and implementing Health Programmes etc.	

2.3. Mentally Disabled Population:

Table: 2.3: Mentally Disabled Population:

CENSUS OF INDIA, 2001

Final Population Totals, West Bengal

Distribution of Total Population,Mentally Disabled Population with Percentage to Total Population and Total Disabled Population by Residence and Sex for India, State and District- 2001

India/State/ District	Type of Disability	Sex	Population-2001			Mentally Disabled Population			Percentage of Mentally Disabled Population to Total Population			Percentage of Mentally Disabled Population to Total Disabled Population		
			Total (million	Rural (m)	Urban (m)	Total '000	Rural '000	Urban '000	Total '000	Rural	Urban	Total	Rural	Urban
INDIA	Mental	Persons	102.86	74.24	28.61	2263	1593	670	0.22	0.21	0.23	10.33	9.73	12.14
		Males	53.22	38.16	15.05	1354	949	405	0.25	0.25	0.27	10.75	10.09	12.68
		Females	49.64	36.08	13.55	909	644	264	0.18	0.18	0.20	9.77	9.23	11.40
West Bengal	Mental	Persons	8.01	5.77	2.24	270	181	88	0.34	0.32	0.40	14.66	13.44	18.03
		Males	4.14	2.96	1.18	156	104	52	0.38	0.35	0.44	14.78	13.49	18.30
		Females	3.87	2.81	1.05	114	77	36	0.30	0.28	0.35	14.51	13.37	17.66
Kolkata	Mental	Persons	4.57	0	4.57	22	0	22	0.49	-	0.49	20.60	-	20.60
		Males	2.50	0	2.50	13	0	13	0.53	-	0.53	21.07	-	21.07
		Females	2.07	0	2.07	09	0	09	0.43	-	0.43	19.94	-	19.94

2.4. The Study Area:

KMC has a total population of 4.58 million, out of which 1.49 million people, constituting one-third of total population live in slums. The baseline survey has been conducted in four municipal wards of KMC namely Ward no 3, 29, 78 and 82 which are characterized by density of slum population. More than 60 percentage of these wards live in slums. The profile and resources available in each slum location presented in this chapter would provide a fair idea about the lack of accessibility of basic services to the underprivileged slum community. In **Ward No 3,** surrounding Belgachia, there are about 6574 households with an estimated slum population of 32875. This area has an underground drainage system. There are 25 primary schools and 14 upper primary schools in the ward. The WHU provides services treatment for vector borne diseases like Dengue, Malaria, and Chikungunia etc. Immunization Programmes covers pregnant women and children.

Ward No. 29 is surrounded by the circular canal in the West and Eastern Railway in the South. The Homeopathic Medical College is situated in the Northern part of this ward. On the east lies Ward No. 30 with Narkeldanga north road separating it from ward 29.In the north, ward no. 14 is separated from this ward by Satin Sen Sarani. This area covers an estimated no. of 9250 households with an overwhelming majority of the population (98%) live in slums. The people, majority of whom are Muslims, are mostly self-employed with small household enterprises. The people of this ward often fall prey to various water-borne and vector-borne diseases and can not afford proper treatment owing to dwindling economic condition. Poverty has a telling effect on the health seeking behaviour of the people in the area. Ignorance, an offshoot, among people about disease prevalence has been a major problem in the area. Family Welfare programmes seems to have no perceptible influence on the population resulting in high family size of the families. There are 18 primary schools and 2 upper primary schools. Anganwadi Centre is functional here, but there is no facility for Mobile Medical Unit and trained dais. The slum dwellers expressed the need of a Mobile Medical Unit in their area and strengthening the clinic with good infrastructures, with minimum pathological testing facilities for better delivery of health care services.

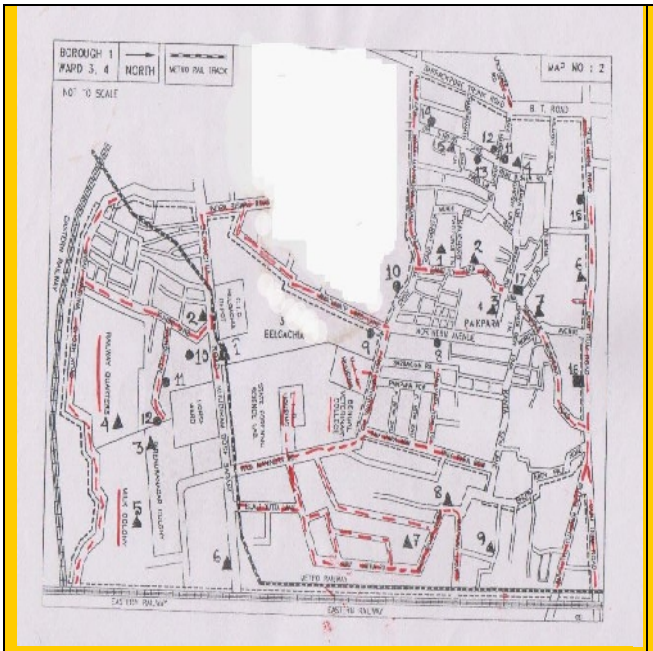
Ward 78 is bounded by ward 77 in the north with Mohammad Iqbal Road separating them. Ekbalpore lane runs through the extreme northern part of this Ward in an east-west direction and meets Diamond Harbour Road, which forms its eastern boundary. On the western side lies Ward 79, while Hussain Shah Road lies to the south side of this Ward. This area covers an estimated population of 58,444 of which 58% of the population (33638) live in slums. In ward no 78 there are two slums namely Mominpur and Mayurbhanj. Muslim people far outnumber other religious composition. There are 19 primary schools and 11 upper primary schools. Anganwadi Centre is functional here, but there is no facility for Mobile Medical Unit and trained dais. Notwithstanding the services of primary and secondary schools, dropping out of school among children at

the primary level has been a major problem in both the major slum settlements in this ward. In terms of livelihoods options, Mayurbhanj is little better placed than Mominpur as more people in the former are engaged in regular jobs than the latter. Poor economic condition has been the major problem for the people of this ward to avail services of costly private medical practitioners.

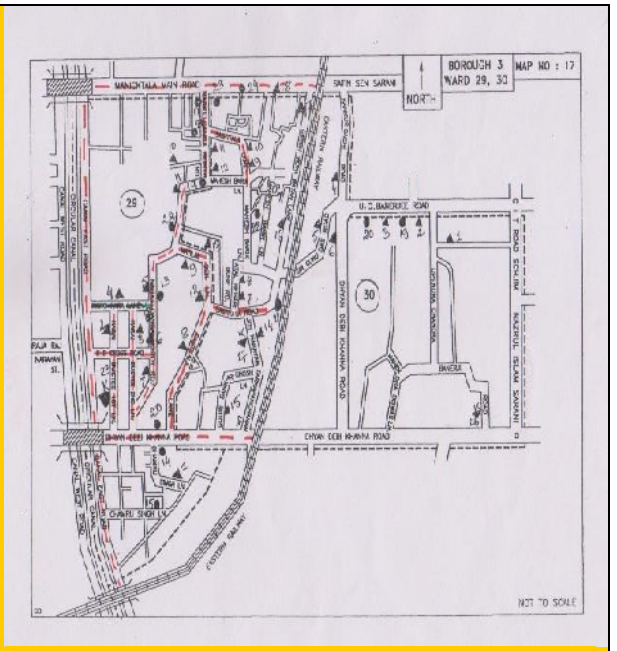
Ward no 82 is situated between Tolly's Nullah in the west and Alipur Road on the east. The eastern –Budge Budge line runs along the southern side of this ward separating it from ward no. 81. Judges' Court Road forms the northern side of this ward joined by Gopal Nagar Road lying in the North West. It includes mostly Bengali speaking people. This area covers an estimated no. of 2488 households which includes one-third population living in slums. The squatter settlements of the Ward are located around Chetla. People are mostly Hindu. They earn their livelihoods through various petty jobs like rickshaw pulling, wage laborers etc. Women are engaged as domestic maids. There are 19 primary schools and 4 upper primary schools. Anganwadi Centre is functional here, but there is no facility for Mobile Medical Unit and trained dais. Lack of livelihoods options for a sizeable population of the slums has been a major impediment to seek health care services. The economic insecurity coupled with poor awareness level seem to have some influence on causation of various types of mental illness observed among the surveyed population more so among the women. The presence of the Red Light Area (RLA) in this ward also influences the alcohol addiction and drug taking behaviour of people. More women than men suffer from various kinds of illnesses.

Ward 54 is surrounded by Dr. Lal Mohan Bhattacharjee Road in the North, Mofidul Islam Lane, Anjuman Road and Harekrishna Konar Street in the South, Dr. Suresh Sarkar Road and Hati Bagan Road (North) in the East and Harekrishna Konar Street and Acharya Jagadish Chandra Bose Road in the West. The residents of the ward are mostly Muslim and their economic condition is very poor. They live in a very congested and dingy place. Educational attainment of majority of the population is very low. They suffer quite often from diseases like Polio, Ricket etc. The people have no idea about Mental Health. They do not have access to medical care and other support services provided by Govt. and NGOs. They have hardly any idea of the facilities for mentally ill persons from the Government. The status regarding family welfare services is poor. Poverty coupled with illiteracy has plagued the people of the area mainly women to seek health care services. The practice of alcoholism is widespread among the male members of the ward.

2.5. Location of Wards:



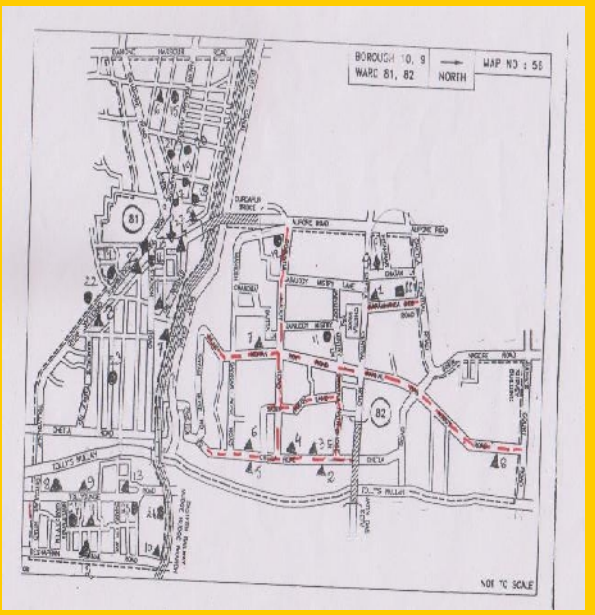
Ward-3



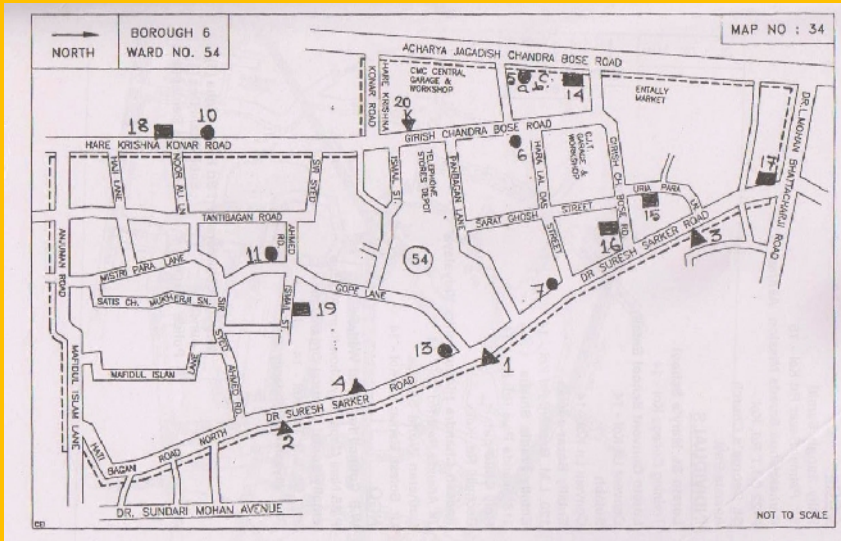
Ward-29

Ward-79

Ward-82



Ward-54



2.6. Density of Population in the Wards under Survey:

Table: 2.4: Density of Population in the Wards under Survey:

Ward No	Total Population	Slum Population	% of slum population	Type of Slum
3	54147	32875	61	Authorised
29	47598	46320	98	Authorised
78	58444	33638	58	Authorised
82	43790	12443	28	Unauthorized
54	39077	989	2.45	Unauthorized

2.7. Ward Wise Population and Demography of the Study Area:

Table: 2.5: Ward Wise Population and Demography of the Study Area:

Demography	KMC Ward- 3	KMC Ward -29	KMC Ward- 78	KMC Ward -82	KMC Ward- 54
Borough	**I**	**III**	**IX**	**IX**	**VI**
Address of Borough	10, B.T. Road, Kolkata - 700 002	109, Moulana AK Azad Sarani, Kolkata-54	11, Belvedere Rd, Kolkata-700027	11, Belvedere Rd, Kolkata-700027	1, Hogg Street, Kolkata-700027
Population	54147	47598	58444	43790	39077
• **Male**	29185	26364	33042	24446	21597
• **Female**	24962	21234	25402	19344	17480
SC population	1794	2268	2459	2372	466

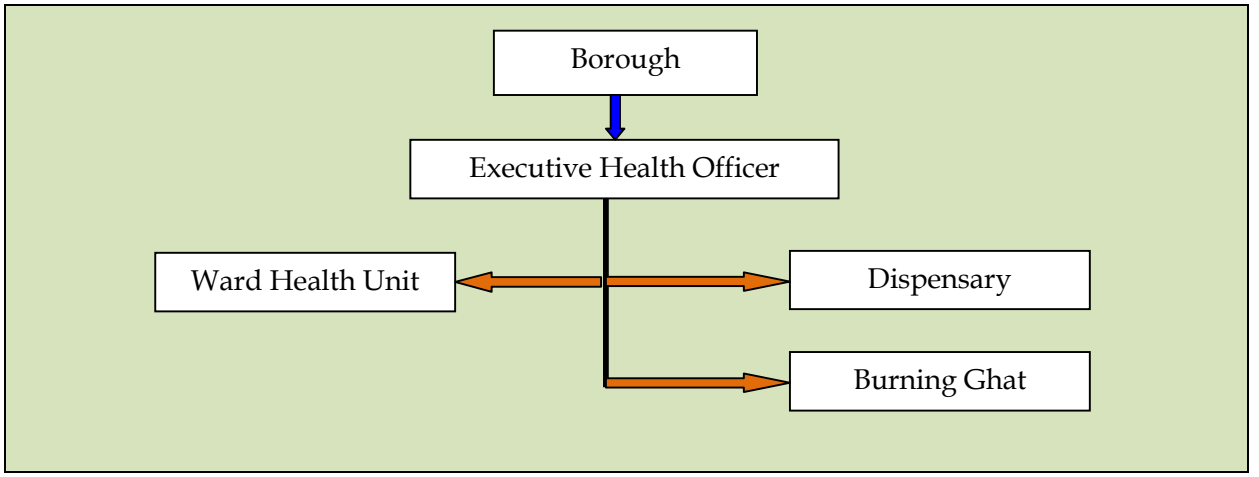
Demography	KMC Ward- 3	KMC Ward -29	KMC Ward- 78	KMC Ward -82	KMC Ward- 54
ST Population	161	8	129	27	21
Sex Ratio	891	781	831	845	827
Literacy Rate	85.4	65.4	77.4	83.2	73.6
• **Male**	89.4	68.9	83.7	87.3	76.2
• **Female**	80.9	60.8	69.8	78.5	70.5
Total Workers	17324	16740	18657	17917	13240
Non-Workers	35975	30147	40273	25430	27059
Marginal Workers	1581	476	1524	744	658
Main Workers	15743	16264	17133	17173	12582
No. of Primary Schools. (DISE*-2009-10)	25	18	19	19	8
No. of UP Schools (DISE-2009-10)	14	2	11	4	6
Presence of Anganwadi Centre under ICDS Yes/No	Yes	Yes	Yes	Yes	Yes
Presence of Mobile Medical Unit Yes/No	No	No	No	No	No
Health Infrastructure of the Wards covered under the study:					
Ward Health Units • **No. of Doctors**	1	1	2	1	2
• **Field Worker**	8	18	4	9	14
• **MHA**	1	0	vacant	1	2
• **Bailiff**	2	3	1	5	2
Any OPD/Institutional care facilities for mentally ill persons	No	No	No	No	No
Location of WHU	28, Beerpara Lane, KMCP School Building	WHU - 29 40, Canal East Road, Kolkata - 11	47A, Ekbalpur Road	WHU - 82 29/5, Chetla Road	Taltala Dispensary, 3, Girish CH. Bose Road, Kolkata-14
Health Care Services available in the Study Area					
Malaria Clinic	28, Beer Para Lar KMCP School Building.	40, Canal East Road, Kolkata - 11	Khidderpore Maternity Home	WHU - 82 29/5, Chetla Road	Taltala dispensery,

Demography	KMC Ward- 3	KMC Ward -29	KMC Ward- 78	KMC Ward -82	KMC Ward- 54
			35/1, Ekbalpur Road		42, Jannagore Rd
Dispensary	Tallah Dispensary 61, B.T. Road, Ward 5 Chitpore Dispensary 3, Gopal Mukherjee Road,	40, Canal East Road, Kolkata - 11	Khidderpore Dispensary 15, Dent Mission Road,	WHU - 82 29/5, Chetla Road	Taltala Dispensary, 3, Girish CH. Bose Road, Kolkata-14
Chest Clinic	Chest Clinic, Bagbazar Street, Ward 7	DOT Centres, Manicktala Chest Ward - 30	Alipore Chest Clinic 3, Reformatory Street.	WHU - 82 29/5, Chetla Road	
Leprosy	Chitpore Dispensary 3, Gopal Mukherjee Road,	109, Narkeldanga Main Road.	Nil	Nil	Taltala Dispensary, 3, Girish CH. Bose Road, Kolkata-14

**** District Information System for Education (DISE)***

2.8. Administrative Structure of Health Care Services in the Study area:

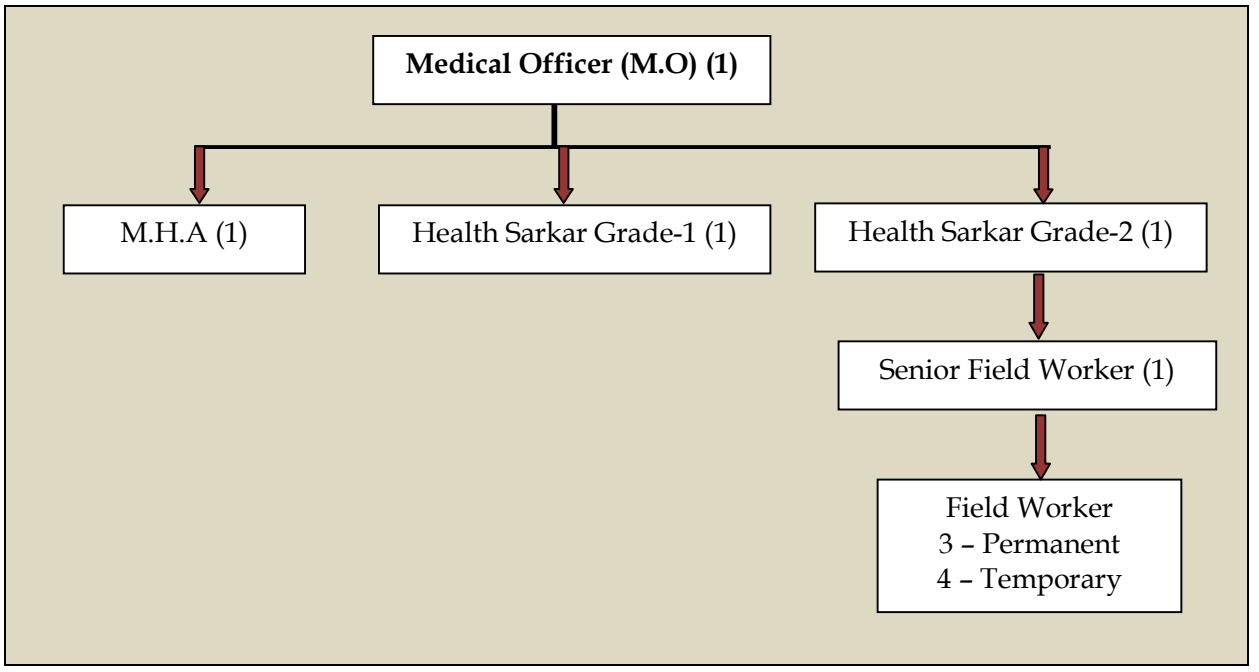
2.8.1. Health Care Structure of Borough:



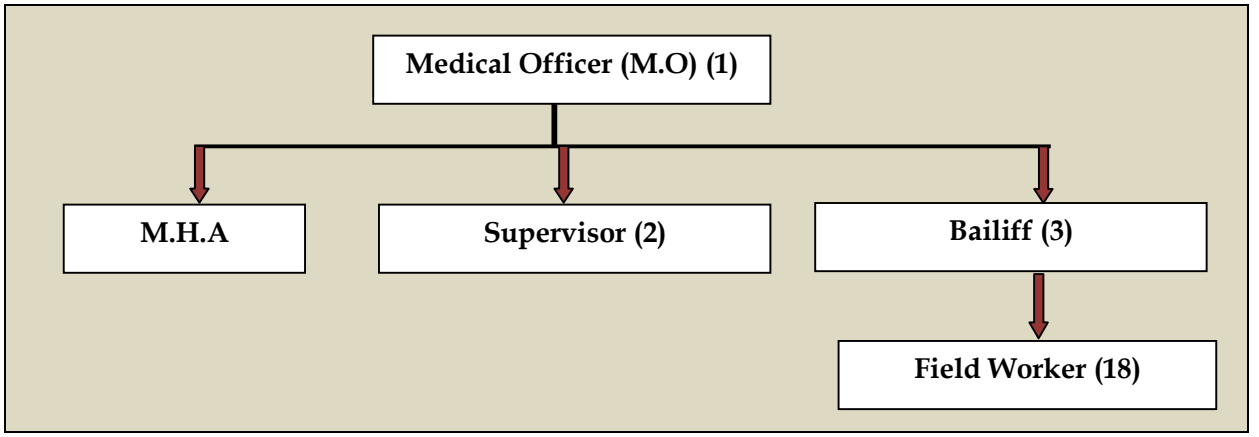
2.8.2. Activities of Borough Health Office:

- Conducting health activities, supervision etc. at the borough level.
- Managing / coordinating Anti-Malaria drives.
- Routine Immunization Programmes for vaccination against Polio, DPT, Hepatitis B, Measles, TB (BCG) etc. at Ward Health Units.
- Administration of curative services such as Maternity Clinics, Chest Clinics, Dispensaries, TB Centres, Malaria Clinics, Hospitals in their respective boroughs.
- Administration of the Burial and Burning Ghats, falling within the borough.
- Issue Birth Certificates within a year of its occurrence.
- Control food adulteration through service of food inspectors in the Borough.
- Control illicit slaughter houses properly.
- Implementation of Janai Suraksha Yojana and Integrated disease surveillance programme

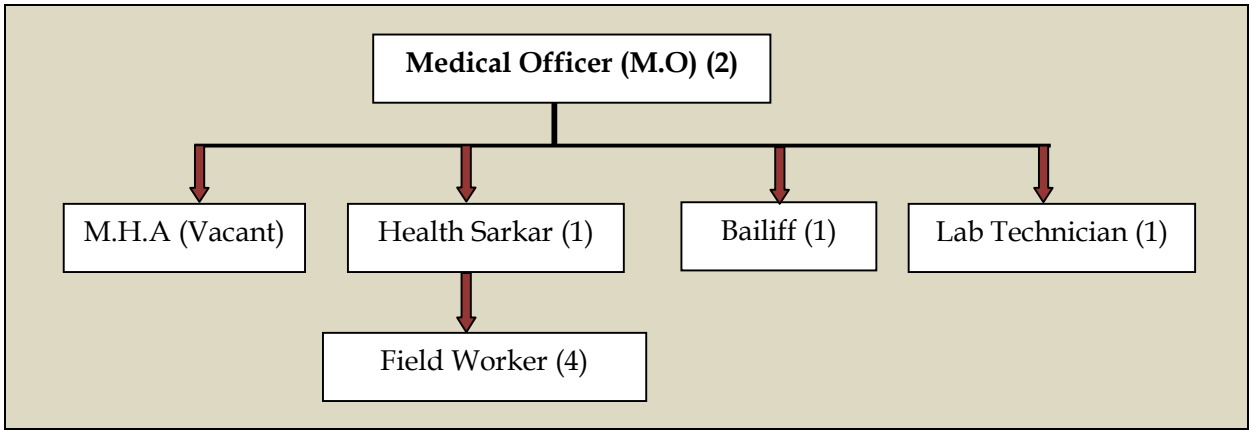
2.8.3. Health Infrastructure of Ward-3



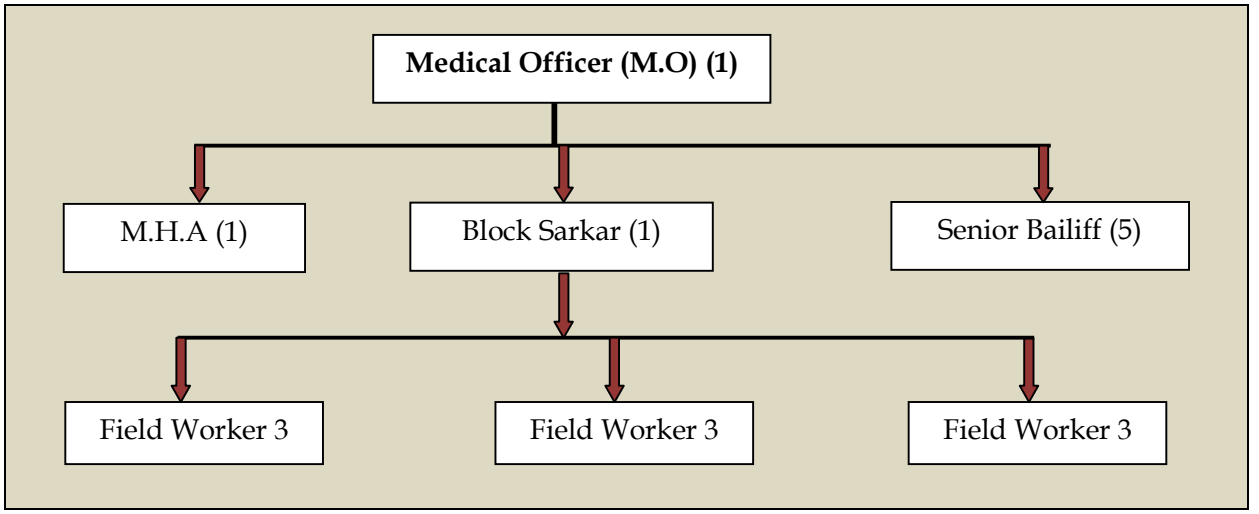
2.8.4. Health Infrastructure of Ward-29



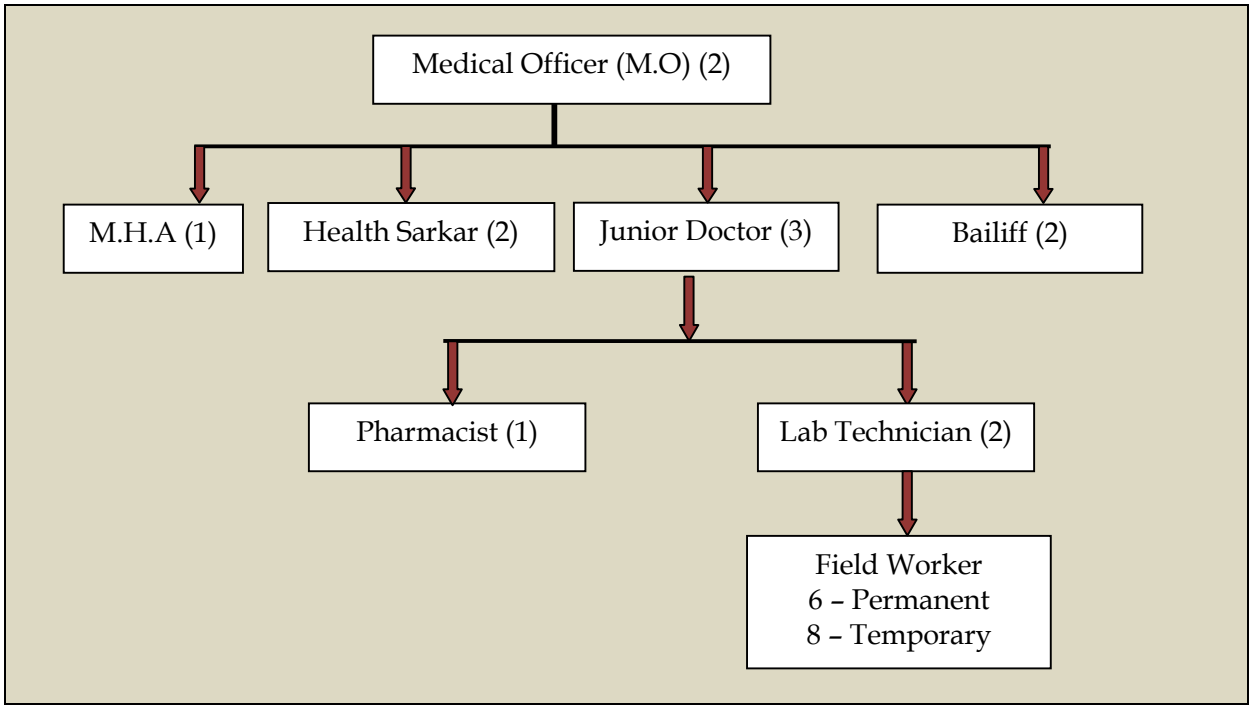
2.8.5. Health Infrastructure of Ward-78



2.8.6. Health Infrastructure of Ward-82



2.8.7. Health Infrastructure of Ward-54



2.8.8. Activities of the Ward Health Unit (WHU) Offices:

- Administration of vector control drives.
- Carry out routine immunization programmes against Polio, DPT, Hepatitis B, Measles, TB (BCG) for children.
- Inventory control and maintenance of chemicals and spraying machines against adult mosquito and larvae.
- Coordination for various health programmes including KUDP – III, KSIP and Indian Population Project IPP-VIII in some of the Ward Health Units.
- Collection of data on birth, deaths, infant, maternal mortality data of the target group under the project.
- Administering of first aid medicines in slum areas.
- Collection of blood slides for malaria and distribution of anti-malaria drugs from malaria clinics.
- Assessing nutritional status of the 0 – 5 years of children.
- Providing immunization service to pregnant mothers.
- Promotion of Health Education.
- School Health Services.
- Curative services to the *Bustee* people in some WHUs.
- DOTS for TB Programme.
- Leprosy clinic, Disinfection services, Disaster Management, Family Welfare Services

Information about the Mental Health Care facilities in KMC and the Ward wise list of CBOs / NGOs are given in the Annexure.

CHAPTER – III

Methodology

3. Background and Rationale of the Survey:

The scope of mental health is not only restricted to treatment of some seriously ill patients in mental health centres, rather it is related to the whole range of health activities. Earlier various steps were taken by government and non-governmental organizations (NGOs) and other agencies to improve mental health services. But, mental health policy did not find a proper implementation in the national and state level health planning. Since independence, both the Centre and state governments recognized the need of a proactive approach to promote mental health.

In India the need is to provide good quality care to those suffering from mental disorders. But, unfortunately, these efforts are only confined to recommendations. Moreover, there is a misconception that mental illness is low in India. It is unfortunate that even after 65 years of independence, besides having a National Mental Health Programme (NMHP); there is no nation-wide epidemiological data of mental illnesses.

Although India lacks any epidemiological data, research studies from different parts of the country have shown that mental illness is equally common in both rural and urban areas. Mental disorder is a burden on affected individuals, their families and society.

Over the years, mental illnesses have increased manifold. Though there is no study, psychiatrists estimate that about 2 per cent of Indians suffer from mental illnesses. Thus in a population of over a billion those suffering from mental diseases is over 2 lakh. With this background, the study was undertaken to examine the state of mental health care services in Kolkata, considering preventive aspects of mental health and recognizing the socio-cultural factors in mental health services

The objective of the study was to review the development of mental health in the city and to analyze implementation of the District Mental Health Programme (DMHP) under the National Mental Health Programme (NMHP).

The study largely relied upon the various secondary sources that is, government reports, policy papers related to mental health published by the Ministry of Health and Family Welfare, Planning Commission, Government of West Bengal and Kolkata Municipal Corporation, other than articles published in various books and journals. For literature review and conceptual clarity on the subject of mental health, both primary and secondary sources were used to gather information about services available to the end users. Information was gathered from various sources along with case studies and

informal interviews with local people, patients and their family members, and service providers -- the doctors and social workers.

Analyzing information from various sources available on health care services to people who are disadvantaged, it was observed that the service delivery mechanism in the field of mental health care services is grossly inadequate. Even it remains outside the reach of majority of the target population. A large number of mentally ill people who belonged to the socio-economically weaker sections of society remain outside the purview of the services and treatment due to their poverty. Moreover, lack of awareness and stigma attached to mental illness led many to land up on the streets as wandering mentally ill – lost within and without. (Iswar Sankalpa, 2010). Poor people in urban areas mostly live in slums in highly unsanitary conditions. The abysmal living conditions in slums coupled with lack of resources and ignorance put a large population vulnerable to mental illness despite the fact that mental health services are of immense importance for everyone who is suffering from any kind of mental illness.

Iswar Sankalpa an NGO launched a unique pilot project for Community Based Care and Support Program for Homeless Mentally Ill in all 141 Wards of Kolkata Municipal Corporation since mid 2007. Primarily it aimed to initiate emergency care and support including treatment for identified population. The project aimed to generate awareness on mental health and to identify mental health needs of homeless population. The project developed linkages between various service providers to evolve strategies to help mentally ill and to establish ground for a sustainable community support in the long run.

Iswar Sankalpa wanted to develop a self-sustaining community care model to help these disadvantaged people. In order to develop a self-sustaining community care model on mental health, the organization needed a fair understanding on the nature of the problem, its extent and magnitude, along with support mechanism available to the target population. Moreover, it also tried to study problems in accessing available services, gaps and challenges in delivering service to the people. So the baseline survey was undertaken to set certain benchmark based on which the impact of the 'Sambandhan' project will be measured. This baseline data shall serve as the pointer for the kind of service that Iswar Sankalpa needs to put in place in respective communities in its three-year project and also serve as benchmark to monitor and evaluate the success of the project's interventions.

Findings of the survey are to be shared with Government and non governmental organizations and to set a dialogue with policy makers to bring changes in the mental health care system. Based on the report of the survey it may be possible to devise a plan of action for capacity building, awareness generation and community mobilization in consonance with the need of the area. The survey will help Iswar Sankalpa to understand the magnitude and nature of the problem of the mentally ill and to identify

the specific gaps in the delivery system of mental health care services. It will also help to design appropriate plan of action to strengthen their existing interventions for promoting mental health care. The findings of the survey will be used by the organization to assess their current interventions for the last three years and to take corrective measures thereupon.

Keeping this long-term end in view, this baseline survey was conducted with technical support and collaboration with Jayaprakash Institute of Social Change (JPISC), Kolkata to set up certain benchmark, which will serve as the pointer for the kind of services Iswar Sankalpa needs to put in place in disadvantaged communities.

3.1 Operational Definition:

Population Coverage: The population residing within the slums in KMC area was covered under this survey and included even those who stay in open space.

House: Every structure, shelter, tent etc. irrespective of its use in a house. We only take houses for residential purposes.

Household: A group of persons normally living together and taking food from a common kitchen for more than 180 days during the last 365 days will constitute a household. If a member of a family, (say a son or daughter) stay elsewhere (say, in hostel for studies or for any other reason), s/he was not considered for the survey.

Household Size: The number of members of a household is its size.

Kutcha/ Semi-Kutcha/ Pucca structure: A structure with walls and roofs made of pucca/ katcha materials is regarded as pucca/ kutcha structure respectively. If either walls or roof, but not both made of pucca materials, we call it semi-pucca structures.

Self-employed: The principal feature of the self-employed is that they had autonomy (i.e. how, where and when produced) and economic dependence (i.e. market, scale of operation and money) for carrying out their operation. The self-employed persons are of three types:

a) Own account workers operating their enterprise on their own account or with partners, without hiring any labourers.
b) Employers who work on their own account or with their partners with hiring labourers.
c) Helpers in household enterprise: A category of person mostly family members working in household enterprise without receiving any salary or wage in return for the work performed.

Regular Wage/ Salaried Employed: Persons getting salary or wages on regular basis (not on the basis of daily or periodic renewal of work contract) in return of work. This category includes persons getting timely wage and piece wage/ salary.

Casual Wage Labourer: Persons getting wage according to the term of the daily or periodical work contract include domestic labourers.

Educational Level: It means different stages of educational attainment. In West Bengal the primary level refers to class one to four, the middle school or upper primary level from class five to eight, while the secondary is from class nine and ten. The higher secondary level constitutes class eleven and twelve.

Literate: A person is considered to be literate if s/he can read and write a simple message in at least with some understanding.

Dropout/ discontinuation: An enrolled student currently not pursuing studies in an educational institution and thus discontinuing study after attending a specific level. S/he may not enroll for next higher level of studies. While a student dropping out before reaching a specific level is known as dropout. Dropouts and discontinuation have been treated alike in this survey.

Slum/ Bustee: A compact area with collection of poorly built hutments, mostly temporary in nature huddled together and lagging adequate sanitary and drinking water facilities. It has a predominant unhygienic environment. Some slums in city are only notified as slums by the authority, but rest are not and are undeclared slums.

Adult: A person who has completed eighteen years of his/her age on the date of survey is an adult.

A child: A person below the age of eighteen years on the date of survey is a child.

Ailment: It means "illness or "injury", i.e. any division from the state of physical and mental well being. But ailment may not cause any necessity of hospitalization confinement to bed or restricted activity. Ailment will not include the cause of sterilization, insertion of IUD, getting MTP etc, and cases of pregnancy and child birth.

Treatment: Treatment taken on the basis of medical advise/ prescription of a doctor (Allopathic, Homeopathic, Ayurvedic, Unani, Hakimi or some other recognized system) either in OPD of a hospital, community health center, KMC dispensary, doctor's chamber, private residence etc had been considered as delivery of treatment. Self-medication or taking medicine on the advice of non-medical persons such as friends, relatives, and pharmacy salesman is not considered as treatment.

Psychoses: Any mental disorder where insight is absent. There is presence of hallucination and delusion.

Neurosis: A term used for relatively mild mental disorders, without apparent organic etiology.

Depression: A state of sadness and pessimistic ideation, with loss of pleasure or interest in normally enjoyable activities. It is accompanied by insomnia or hypersomnia, diminished ability to think and recurrent thoughts of death and suicide.

Epilepsy: A neurological disorder usually associated with brain damage.

3.2 Scope of the Study:

This survey has made an attempt to capture relevant information pertaining to mental health problems in the respective wards, the socio-economic conditions influencing the people's access to mental health services, nature and levels of existing mental health services and community environment with respect to mental illness. The scope of the survey can be studied under four major heads mentioned below:

a. Exploring knowledge and awareness of mental health issues in the community.
b. Understanding community's attitude towards mental illness and its consequences.
c. Mapping out the currently existing mental health problems in the given geographical area and an assessment of available services.
d. Comparing the findings with available demographic details from already published literature from Govt. and Non-govt. sources and also through field surveys.

The survey focused on the following major research questions:

- What conditions do the community attributes to mental health problems
- What were the assumed causes according to folk wisdom
- What kind of interventions the community thinks appropriate for these conditions
- What were the community's attitude and reactions towards members so afflicted
- What did the community feels to this usual long-term outcomes of these conditions
- Whether the community made any distinction between physical and mental illness in terms of attitude towards these conditions and help seeking behaviours regarding these
- Who were affected with current or past mental health problems, nature and duration of such problems, nature and degree of disability and burden faced by the individual and family members due to presence of these conditions
- What kinds of services were accessed by individuals/family men and degree of success of such interventions in addressing/ reducing suffering/burden/ disability
- What were the services available (both general and psychiatric) in the given area. This will include both govt and private services. NGO services, if any, shall also be included in the map.

3.3 Objectives:

- Strengthening of existing mental health services (through improvement in access and quality of services)
- Justification of introduction (if any) of new kind of services
- Change and improvement in health seeking behavior in the community regarding mental health
- Change in perception, awareness and knowledge of mental health in community.

3.4 Sampling Frame and Sampling Procedure:

The survey covered 6 wards in Kolkata Municipal Corporation area mainly concentrating on slums in each ward as the sample frame. Two wards were selected randomly for pre-pilot and pilot study and remaining 4 for the baseline study. Since the BPL families were the target group of the survey, the survey covered the slums as most BPL families live in these slums. Four wards of KMC namely Ward No. 3, 29, 78, and 82 were selected as the baseline for collection of information from the mentally ill persons. These wards barring Ward No. 82 had more than 60% of slum population. Ward No. 82 was selected purposively as Iswar Sankalpa had been working in this ward for the last three years and its socio-economic relevance owing to presence of a very old RLA of the city. **(Annexure – VIII: Slum Population in KMC Area, Annexure – IX: List of thickly populated wards in KMC Area)**

From each spectrum 200 cases, both male and female, were selected on the basis of non-probability snowball sampling and purposive sampling method. The respondents were selected on the following manner:

i. In order to determine prevalence of mental illness among residents of the surveyed area, case vignettes were explained to the community people and according to their reference, cases were identified following snowball sampling method;
ii. General Health Questionnaire (GHQ) was administered among the patients who attended WHU during the reference period of the survey on purposive manner and among those who scored more than or equal to 8 were identified as respondents;
iii. Already diagnosed patients who were identified by Health Workers and Iswar Sankalpa field workers keeping in view the purpose of the survey.

The mentally ill patients who were in a state of conversation were interviewed and the family members were also inquired.

Table No 3.1: Demography of Wards at a glance:

Ward No.	Name of Street	Total Population	Male	Female	Slum Population
3	**Belgachia**	52736	27145	25590	32875
29	**Narkeldanga**	53578	28942	24631	46320
78	**Mominpur**	53919	28345	25573	33638
82	**Chetla**	38930	19853	19065	12443
54	**Entally**	39077	21597	17480	989

3.5 Data Collection Methods:

3.5.1 Quantitative Methods

i. Semi-structured Interview Schedule: This was developed for focusing on the following issues: **(Annexure – IV)**
   - The causal factors that contribute to mental health;
   - The kind of intervention that the community thinks appropriate for mental health problems;
   - Their attitude and reactions towards the person suffering from mental illness;
   - Their feeling about long term treatment of mental health problem;
   - Their opinion about the distinction of mental and physical illness;
   - The health seeking behavior regarding all these mental health problems;
   - Burden faced by the individual suffering from mental health problems and family members, nature and duration of these problems and nature and degree of disability;
   - Intervention to reduce the suffering;
   - Kinds of services accessed by the community, effectiveness of such services to address their problems.

ii. General Health Questionnaire (GHQ12) developed by Goldberg and Hiller, 1979

iii. KAP for Health workers and members of the community (developed by NIMHANS) **(Annexure – III)**

iv. KAP for doctors (developed by NIMHANS) **(Annexure – V)**

v. The World Health Organization Disability Assessment Schedule 2.0 (WHODAS 2.0) assesses day to day functioning in six activity domains. Results provide a profile of functioning across the domains, as well as an overall disability score. The WHO Psychiatric Disability Schedule (WHODAS) with a Guide to its use was initially published by WHO in 1988 to provide a simple tool for assessing disturbances in social adjustment and behavior in patients with a mental disorder. The current

version (WHODAS II) represents a complete revision, reflective of WHO's current thinking about functioning and disability.

3.5.2 Qualitative Methods:

- Key Informant Interview (KII) with medical officers, Health workers, community support groups, staff working in WHU, etc were conducted.
- Focus Group Discussion (FGD) as a tool for making the study more relevant with the participation of the respondents were conducted to capture more insightful observations of the slum dwellers, community leaders, health workers etc.
- Participatory observations.

3.5.3 Baseline Tools, Target and Purpose:

STAGE	TARGET	TOOL	PURPOSE
1A	GENERAL POPULATION	CASE VIGNETTES	To determine the prevalence
1B	PATIENTS AT WHU	GHQ 12	To determine the prevalence
1C	GENERAL POPULATION	FGD	Knowledge and attitude to mental illness; Difference in health seeking behavior physical versus mental health; stigma
	FORM 1 A		The ICD 10 criterion
2B	IDENTIFIED PATIENTS & FLY	SEMI STRUCTURED INTERVIEW	Understand the Barriers to the use of service with reference to access, stigma, discrimination, Barriers related to lack of acceptability and Satisfaction with existing care arrangements, lack of psychosocial support, lack of health promotion efforts. To find out the help seeking attitude of the mentally ill people and their family members.
2C	IDENTIFIED PATIENTS	WHODAS	Percentage of disability due to mental illness
3	WHU PERSONNEL	SEMI STRUCT INTERVIEW	Measure the skill and attitude of the Personnel towards mental illness and mental health.

3.5.4 Plan for the Field Work

Before the onset of data collection, a joint meeting was organized with core team members and field investigators to discuss the modalities for conducting the survey and procedure for administering the tools in the field situation. An orientation was also given by the technical professionals of Iswar Sankalpa and JPISC to the field investigators on field testing during the pre-pilot and pilot stages of the survey. These two stages were planned to familiarize the investigators with field situation and also to achieve precision to correctly administer the tools while conducting the baseline survey. Standard methodological tools for sampling and cognizant of demographic, gender representation were used for the purpose of the survey. The FGD parameters and KII interview guide were prepared in due consultation with the experts of Iswar Sankalpa.

The team members visited the WHU and the community with the guidance of the local councilors and the health workers, in presence of experts including psychologist and social worker. In the WHU the doctors and other key informants were interviewed. Team members administered the GHQ12 on the patients visiting the WHU with the guidance of the doctors to determine the prevalence of mental illness among the people in the area. The investigators visited the community and used the case vignettes and semi structured interview schedule to screen those who were suffering from mental illness and their families. They also administered the WHO DAS II scale to the identified patients. The details of procedure for tool administration have been mentioned in the schematic representation in sub-section 3.5.6 of this chapter.

Interviews as a methodological tool was conducted not only to gather data but also to share information with the respondents in a more informal setting. Different methods like FGD, KII, and informal discussion to gather information beyond individual responses were also conducted to probe community's perception about the problem.

In each ward some of the homogeneous groups were formed and FGDs were arranged. The topics and key questions of FGDs were predetermined. The discussions were conducted by the experts. Each discussion was held for about two hours. The verbatim speech of the speakers was taken. On completion of the data collection, the data were tabulated and analyzed. The findings from the field survey had been analyzed and presented with graphical representation in the following chapter.

3.5.5. Technical Support from Iswar Sankalpa:

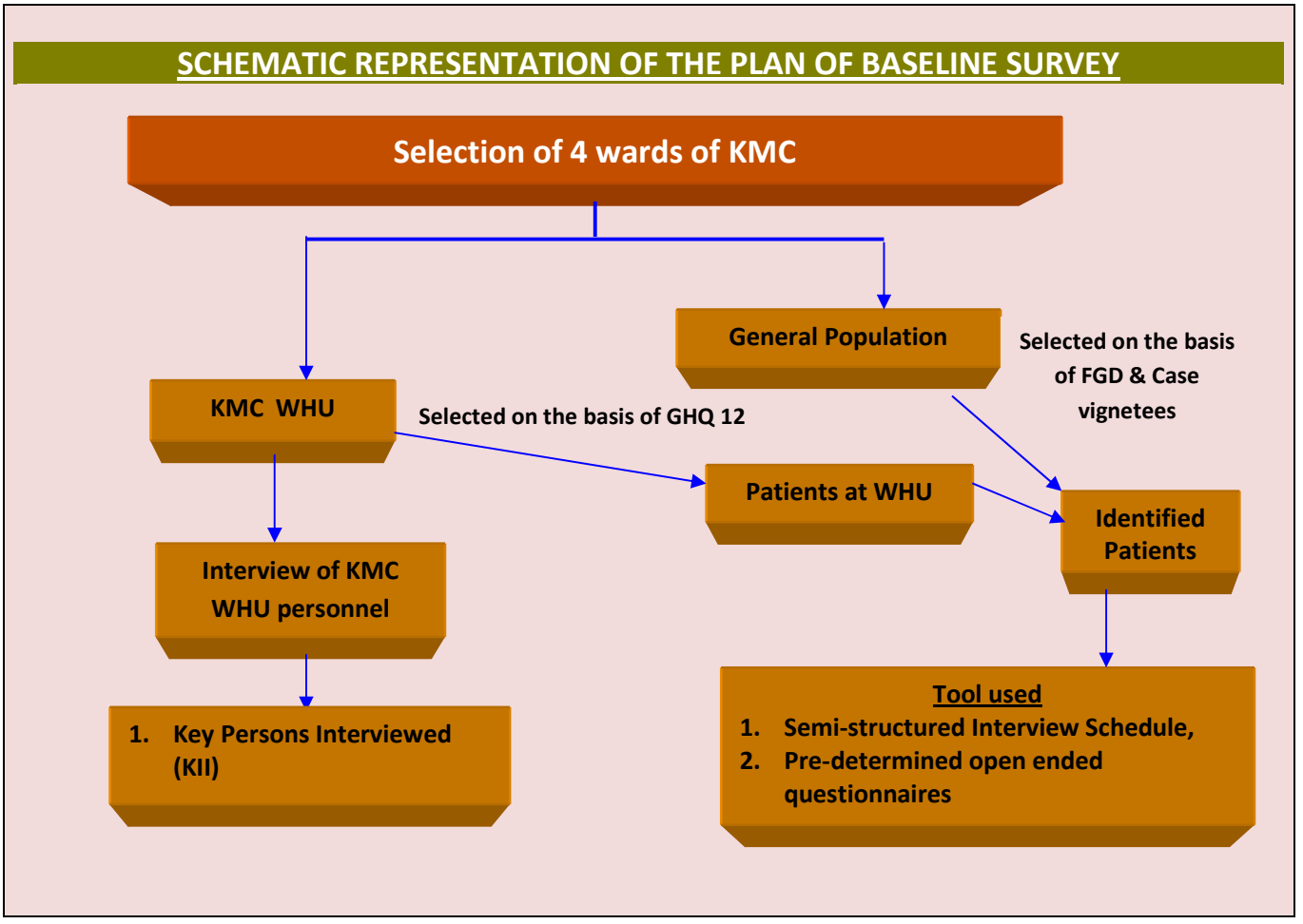
Since inception, Iswar Sankalpa was involved in every stage of planning, designing and administration of this survey. Starting from negotiating with KMC to secure their permission to conduct the survey to organize orientation by experts for the field workers and in providing technical support in framing the tools, thus Iswar Sankalpa played a lead role. The untiring efforts of the field workers of Iswar Sankalpa has made

it possible for the field workers of JPISC to identify the patients and also in organizing FGDs and KIIs with community and health workers. To ensure proper monitoring of the survey, initiatives were taken by Iswar Sankalpa to organize review meetings on every Friday, which had been of great help to the field workers of JPISC to ensure reliability of information captured in the field. The Counsellor and the Social Workers played a great role in mentoring the field workers in conducting the survey.

3.5.6 Limitations of the study include:

i. The sample size should have been bigger. This study has focused only on 4 wards. If more wards were taken into account, then it would have helped to get a better picture of the prevalence.
ii. Only three types of diseases were observed, whereas there are many types of mental disorders and disabilities. Those need to be considered for proper intervention plan.
iii. Some more standardized questionnaires could have been used.
iv. Last but not the least, the time granted for the study was too short.

3.5.7 Schematic Representation



3.6 Time Line: 3 months (June-Aug, 2011)

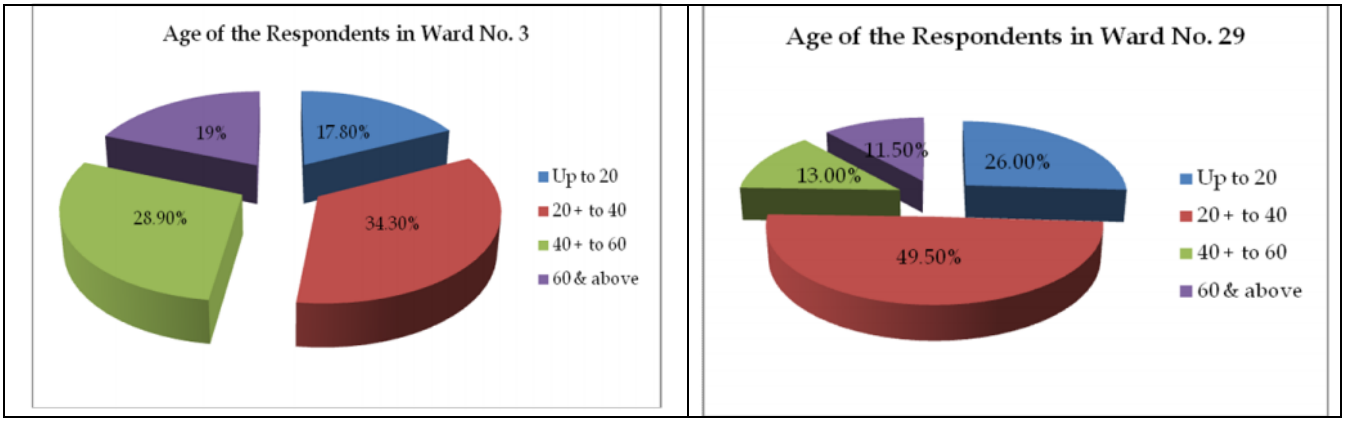
CHAPTER – IV

Profile of the Mentally Ill Persons and their Degree of Disability

This chapter presents information about the demographic profile of the respondents (mentally ill people), nature of their sufferings, treatment received, kinds of services accessed by the community, effectiveness of such services to address their problems with the help of the specific tools used in this research. The tools used included; a previously prepared interview schedule for screening the respondents; WHO DAS for assessing the degree of disability caused by the specific M>I; GHQ12 which is also another screening test for evaluating the general health status. The data had been tabulated as obtained from the four different wards. In the first part the demographic profile has been provided separately for each ward. Similarly, in the second part tabulation of the semi-structured interview schedule has been done on the basis of five key questions which were important among the others and reflect the significance of the interview schedule. The third part comprises the data table of WHO DAS for the different wards. The last part has the data table of GHQ12.

Table no 4.1. Age of the Respondents:

Age (Yr.)	Ward 3 (N=242)	Ward 29 (N=200)	Ward 78 (N=200)	Ward 82 (N=202)	Ward 54 (N=130)
Up to 20	43 (17.8%)	52 (26%)	43 (21.5%)	53 (26.2%)	27 (20.77%)
20 + to 40	83 (34.3%)	99 (49.5%)	95 (47.5%)	65 (32.2%)	53 (40.77%)
40 + to 60	70 (28.9%)	26 (13%)	44 (22%)	58 (28.7%)	35 (26.92%)
60 & above	46 (19%)	23 (11.5%)	18 (9%)	26 (12.9%)	15 (11.54%)
TOTAL	**242**	**200**	**200**	**202**	**130**



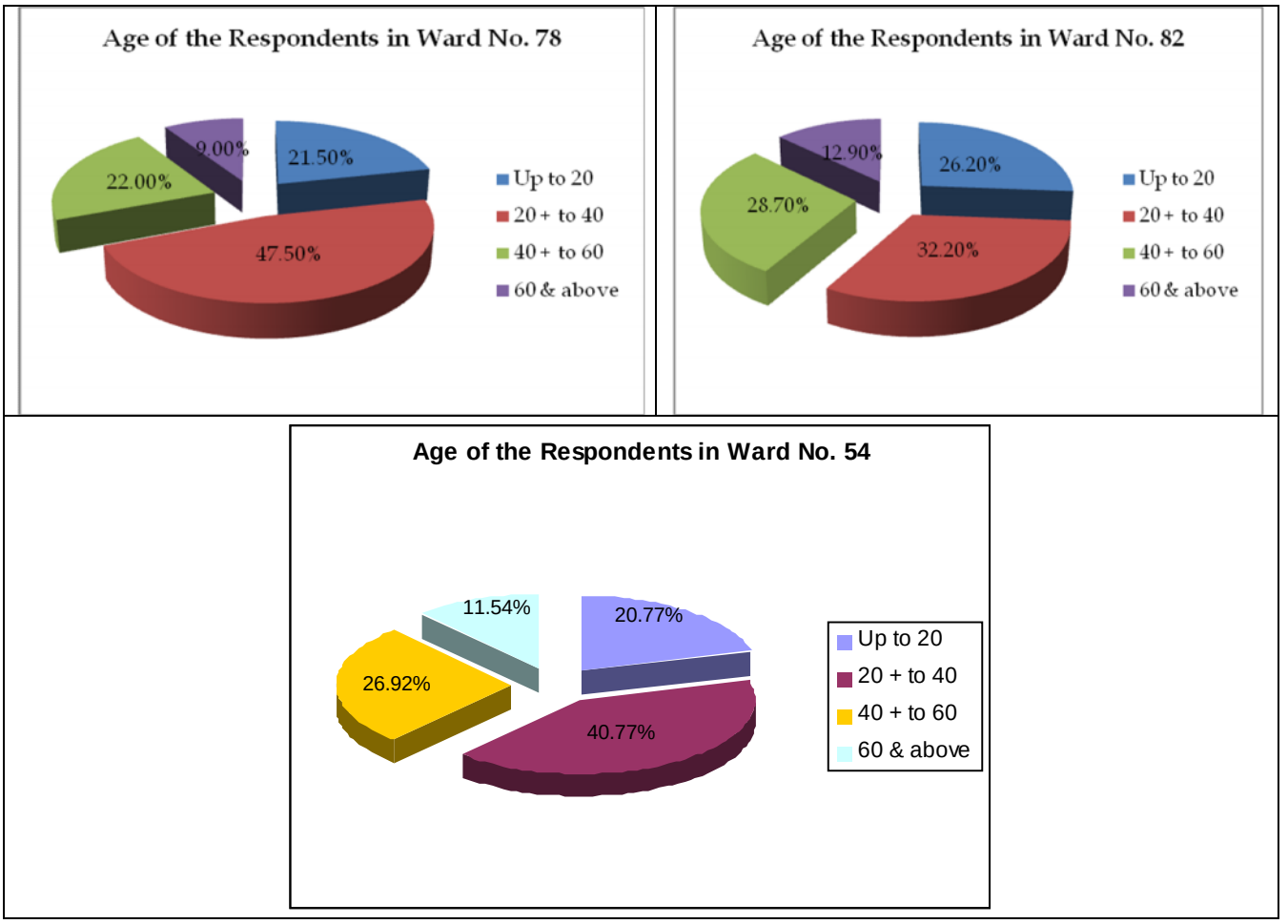


Diagram: 4.1: Age of the Respondents

Table No. 4.1 reflects that the population is higher between the age group of 20+ to 40 years in all the five wards of the study area. Nearly half of the mentally ill people in ward no 29 and 78 fall in the category of young adults. The proportionate representation of the aged people is lower among the respondents in all the wards. It seems that young adults are more prone to any kind of mental illness than any other age groups.

Table no 4.2 Sex of the Respondents:

Sex	Ward-3 (N=242)	Ward-29 (N=200)	Ward-78 (N=200)	Ward-82 (N=202)	Ward-54 (N=130)
Male	116 (49%)	117 (59%)	102 (51%)	72 (36%)	75 (58%)
Female	126 (51%)	83 (41%)	98 (49%)	130 (64%)	55 (42%)
Total	**242**	**200**	**200**	**202**	**130**

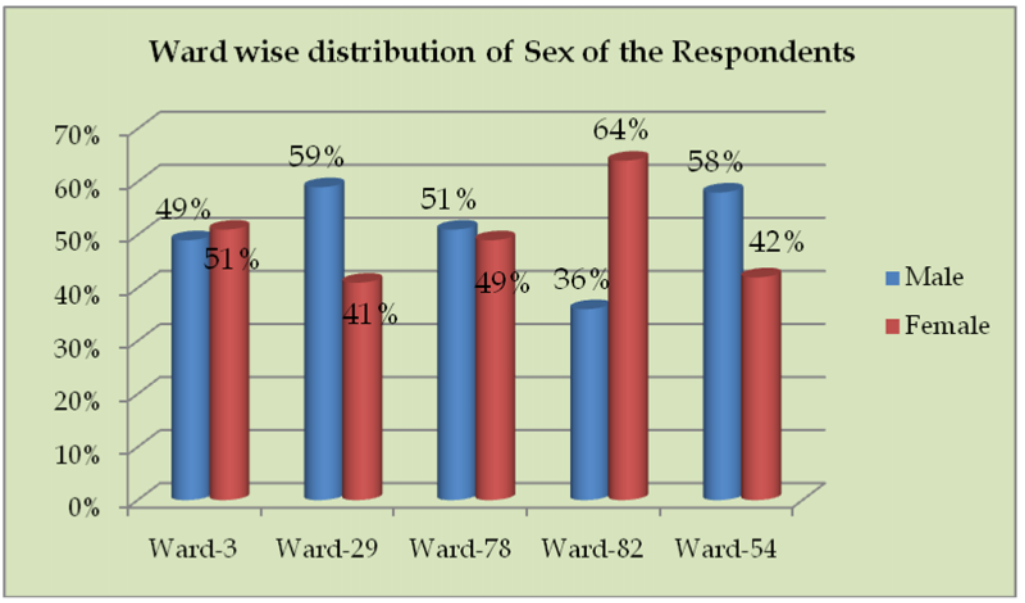
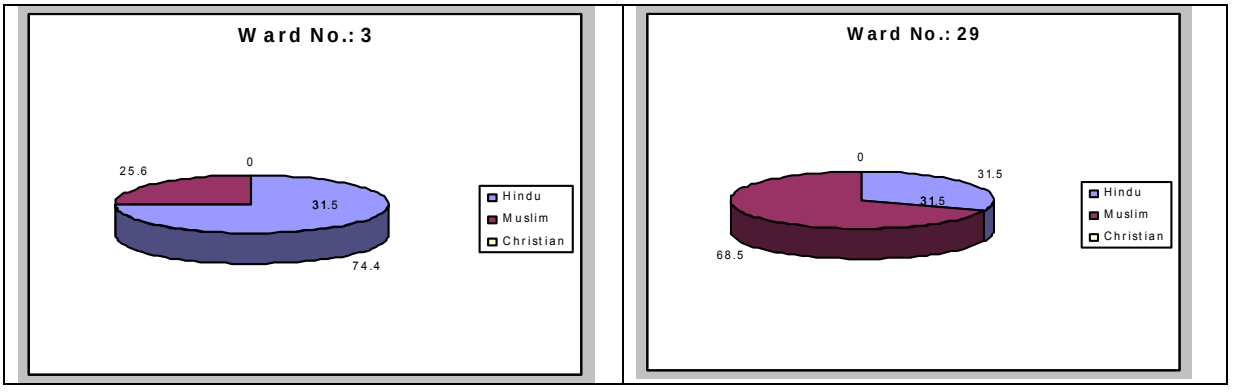


Diagram: 4.2: Sex wise distribution of the Respondents

Sex wise distribution shows that more male than female are affected by mental illness in Ward nos. 29, 54 and 78; whereas, in Ward no. 3 and 82 the scenario is opposite and the numbers of female respondents are higher (51% and 64%) than male (49% and 36%) respectively. In general it is observed that both male and female suffer from mental illnesses.

Table no 4.3 Religion of the Respondents:

Religion	Ward 3 (N=242)	Ward 29 (N=200)	Ward 78 (N=200)	Ward 82 (N=202)	Ward 54 (N=130)
Hindu	180 (74.4%)	63 (31.5%)	38 (19%)	200 (99%)	53 (40.77%)
Muslim	62 (25.6%)	137 (68.5%)	160 (80%)	1 (0.5%)	72 (55.38%)
Christian	0	0	2 (1%)	1 (0.5%)	5 (3.85%)
TOTAL	**242**	**200**	**200**	**202**	**130**



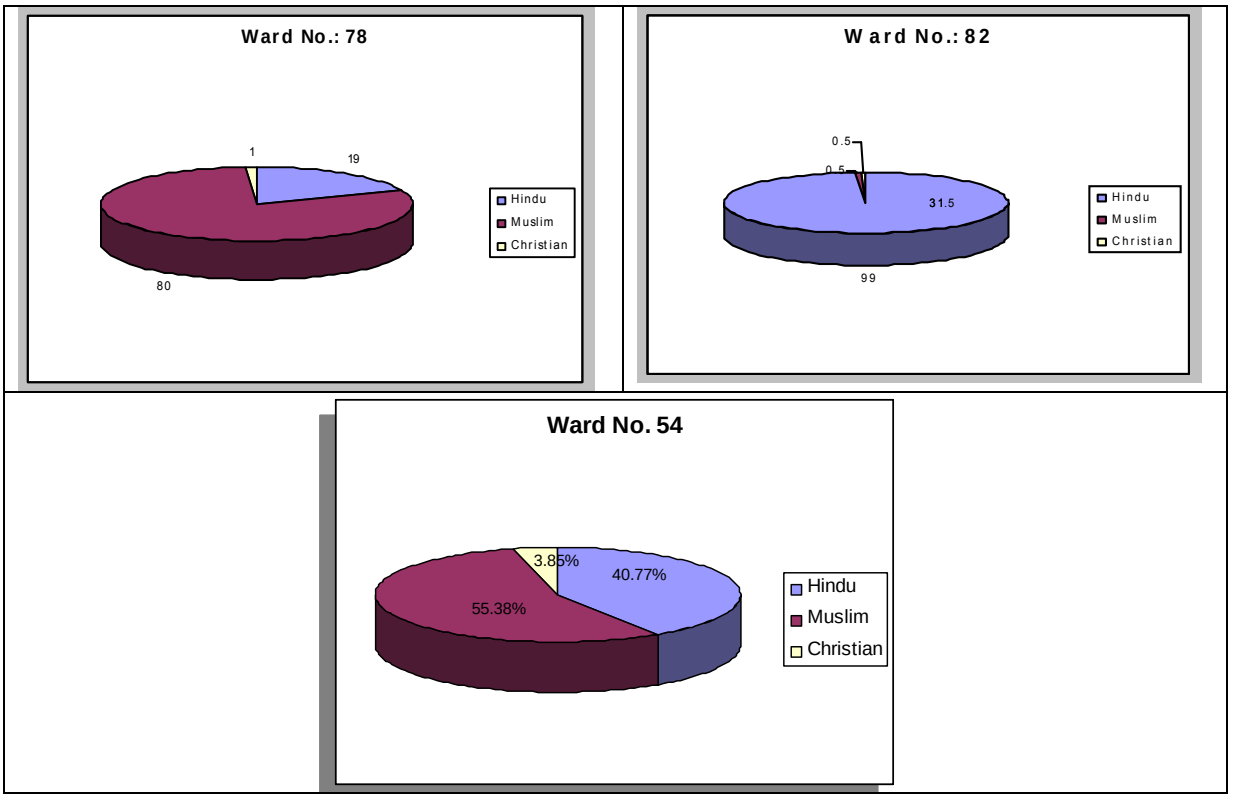


Diagram: 4.3 Religions of the Respondents

This table shows that the respondents of Ward no 3 and 82 are dominated by the Hindu population and of Ward no 29, 54 and 78 are mostly inhabited by Muslim people. There is a very small presence of Christian community in all the wards. In ward 54, about 5 percent belong to Christian community and the corresponding figures in Ward no. 78 and 82 are 1% and 0.5% respectively.

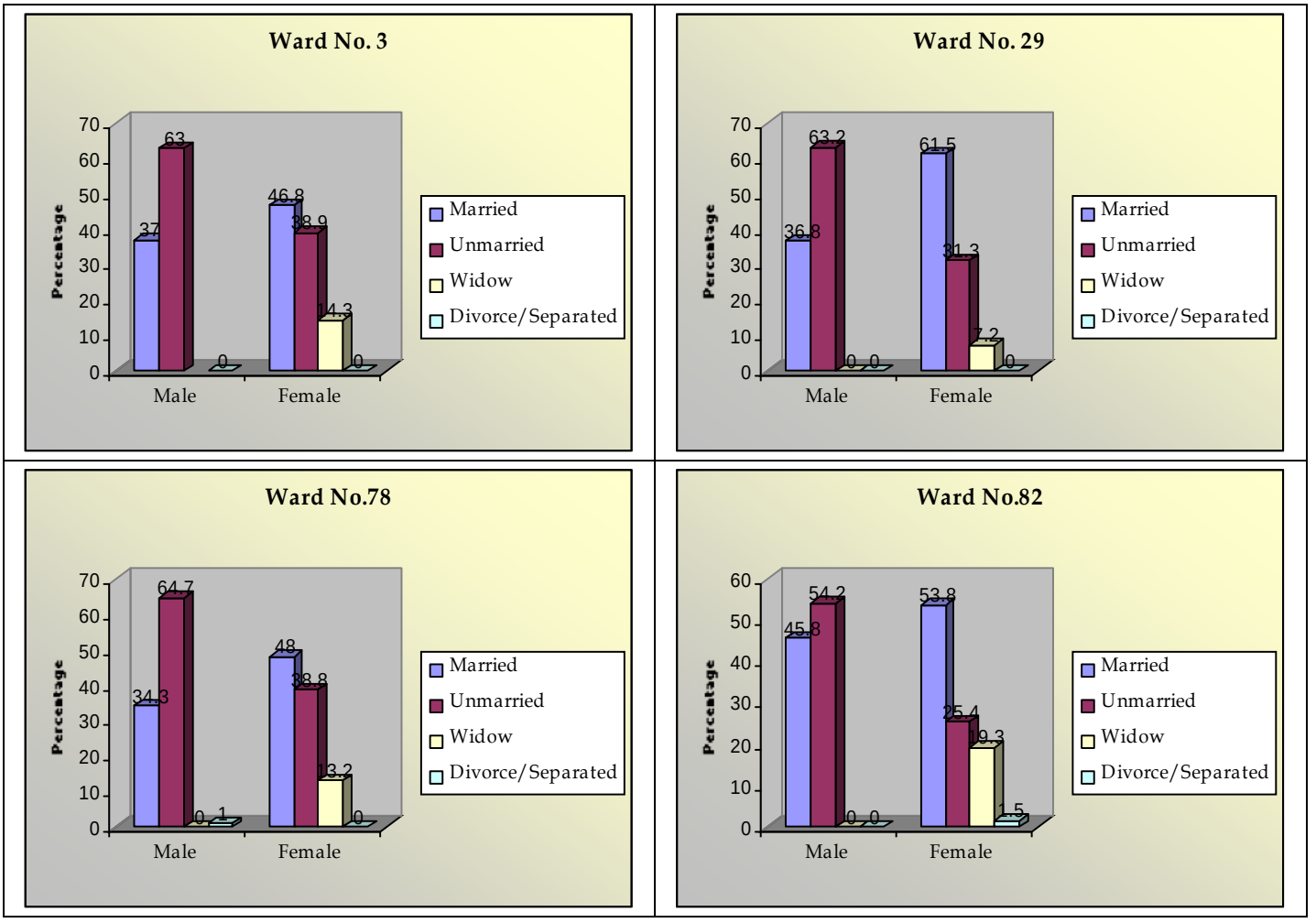
Table no 4.4 Socio Economic Status of the Respondents:

Socio Economic Status	Ward 3 (N=242)	Ward 29 (N=200)	Ward 78 (N=200)	Ward 82 (N=202)	Ward 54 (N=130)
APL	0	0	0	0	0
BPL	242 (100%)	200 (100%)	200 (100%)	202 (100%)	130 (100%)
TOTAL	**242**	**200**	**200**	**202**	**130**

The above table states that all the respondents from all the five wards belong to Below Poverty Line (BPL) group.

Table no 4.5 Marital Status of the Respondents (Sex wise):

Marital Status	Ward – 3		Ward – 29		Ward – 78		Ward – 82		Ward – 54	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Married	43 (37%)	59 (46.8%)	43 (36.8%)	51 (61.5%)	35 (34.3%)	47 (48%)	33 (45.8%)	70 (53.8%)	25 (33.33%)	19 (34.55%)
Un-married	73 (63%)	49 (38.9%)	74 (63.2%)	26 (31.3%)	66 (64.7%)	38 (38.8%)	39 (54.2%)	33 (25.4%)	49 (65.33%)	25 (45.46%)
Widow	-	18 (14.3%)	-	6 (7.2%)	-	13 (13.2%)	-	25 (19.3%)	-	7 (12.72%)
Divorce/Separated	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (1%)	0 (0%)	0 (0%)	2 (1.5%)	1 (1.34%)	4 (7.27%)
Total	**116**	**126**	**117**	**83**	**102**	**98**	**72**	**130**	**75**	**55**
TOTAL (N)	**242**		**200**		**200**		**202**		**130**	



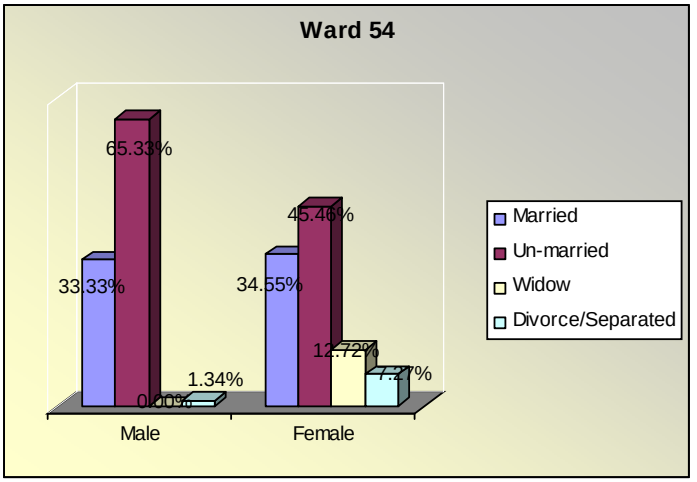


Diagram: 4.4 Marital Status of the Respondents (Sex wise)

In ward no. 3, 42.1% of the respondents were married, 50.4% unmarried and 7.4% widow. In Ward no. 29, 49.5% were married, 47.5% unmarried and 3% widow. In both of the mentioned wards none was divorced or separated from their married partner. In Ward no. 78, the percentage of unmarried is higher (50%) than the married persons (42.5%); 6.5% were widow and only 1% was either divorced or separated. The data of Ward no. 82 shows that, 49.5% of respondents were married and 37.7% unmarried, widow comprised 19.3% and a very small percentage (1.5%) were either divorced or separated. In ward 54, more unmarried, both male and female, than married were suffering from some kind of mental illness. It is observed that religion and marital status were not significant factors in the causation of mental illness.

Table no 4.6 Occupation of the Respondents (Sex wise):

Occupation	Ward – 3		Ward – 29		Ward – 78		Ward – 82		Ward – 54	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Employed	23 (19.8%)	8 (6.3%)	35 (29.9%)	2 (2.4%)	27 (26.5%)	13 (13.3%)	16 (22.9%)	19 (14.6%)	13 (17.33%)	6 (10.90%)
House wife	0 (0%)	10 (7.9%)	0 (0%)	22 (26.5%)	0 (0%)	5 (5.1%)	0 (0%)	20 (15.4%)	0 (0%)	15 (27.28%)
Student	2 (1.7%)	4 (3.2%)	3 (2.6%)	2 (2.4%)	0 (0%)	0 (0%)	4 (5.7%)	2 (1.5%)	3 (4.00%)	3 (5.45%)
Unemployed	91 (78.5%)	102 (81%)	79 (67.5%)	57 (68.7%)	75 (73.5%)	80 (81.6%)	50 (71.4%)	89 (68.5)	56 (74.66%)	31 (56.37%)
Retired	0 (0%)	2 (1.6%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3 (4.00%)	0 (0%)
Total	**116**	**126**	**117**	**83**	**102**	**98**	**70**	**130**	**75**	**55**
TOTAL (N)	**242**		**200**		**200**		**202**		**130**	

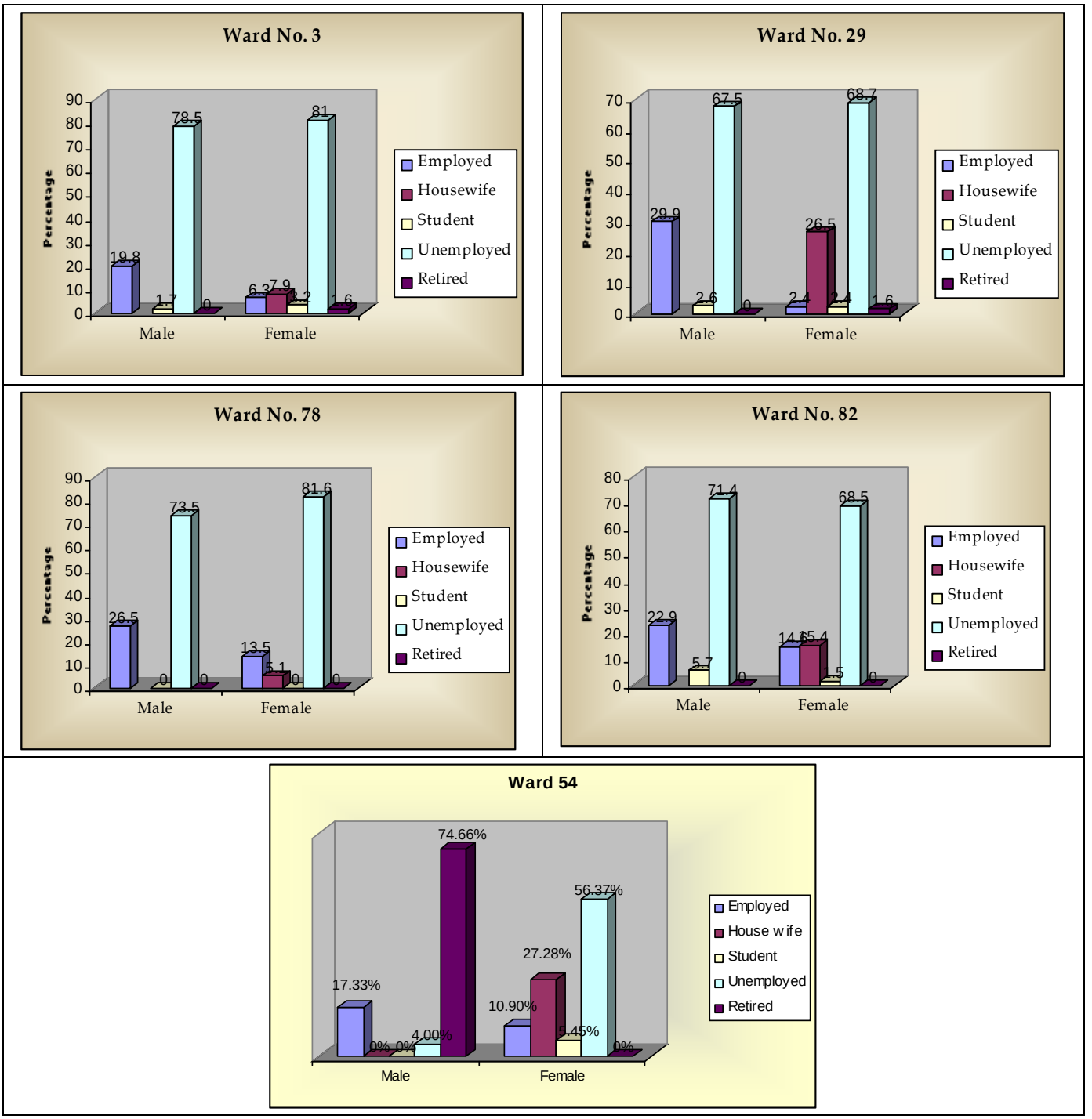


Diagram: 4.5 Occupations of the Respondents (Sex wise)

The respondents were mostly unemployed (79.8%) in Ward no. 3. In Ward no. 29, the percentage of unemployed respondents is as high as 69.5%, 17% are paid workers, none are retired person. 77.5% are unemployed and 20% paid workers in Ward no. 78. In Ward no. 82, the situation is similar to ward no. 29 and 78, i.e 69.5% are unemployed. Among

the other, 17.3% are paid workers, 10.9% house wives and only 2.9% are students, but none of them are retired person. In ward 54, about 67% of the respondents were unemployed.

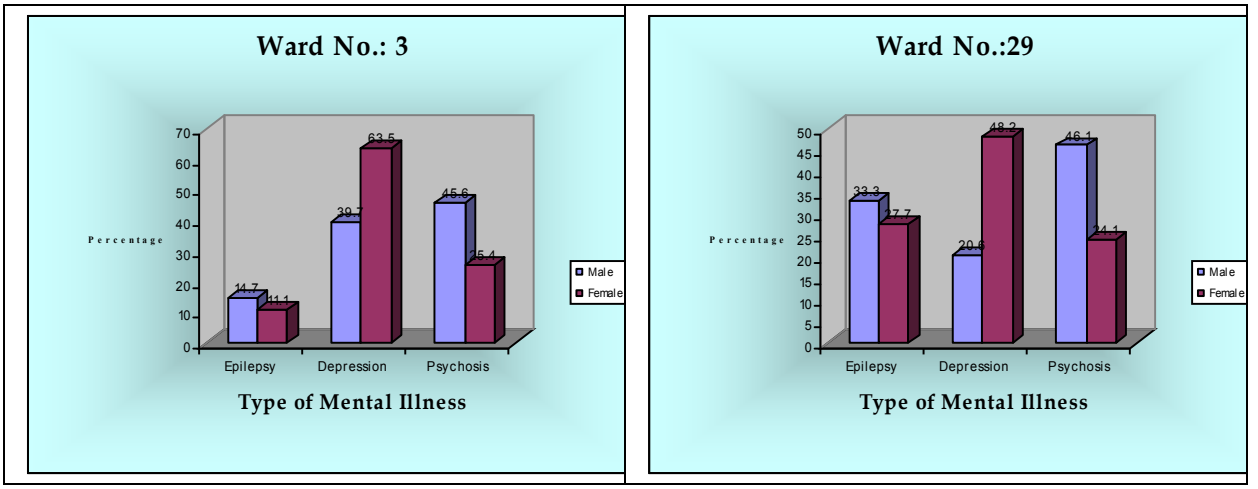
Table no 4.7 Type of Complaint: (Multi-responses)

Type of Complaint	Ward 3 (N=242)	Ward 29 (N=200)	Ward 78 (N=200)	Ward 82 (N=202)	Ward 54 (N=130)
Physical	0	0	0	0	0
Mental	242 (100%)	200 (100%)	200 (100%)	202 (100%)	130 (100%)
Total	**242**	**200**	**200**	**202**	**130**

All the respondents have complained about mental problems.

Table no 4.7.1 Prevalence of Mental Illness in different wards:

Illness	Ward – 3		Ward – 29		Ward – 78		Ward – 82		Ward – 54	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Epilepsy	17 (14.7%)	14 (11.1%)	39 (33.3%)	23 (27.7%)	29 (28.4%)	21 (21.4%)	23 (31.9%)	16 (12.3%)	41 (54.67%)	30 (54.54%)
Depression	46 (39.7%)	80 (63.5%)	24 (20.6%)	40 (48.2%)	35 (34.3%)	56 (57.2%)	22 (30.6%)	87 (66.9%)	25 (33.33%)	16 (29.09%)
Psychosis	53 (45.6)	32 (25.4%)	54 (46.1%)	20 (24.1%)	38 (37.3%)	21 (21.4%)	27 (37.5%)	27 (20.8%)	9 (12.00%)	9 (16.37%)
Total	**116**	**126**	**117**	**83**	**102**	**98**	**72**	**130**	**75**	**55**



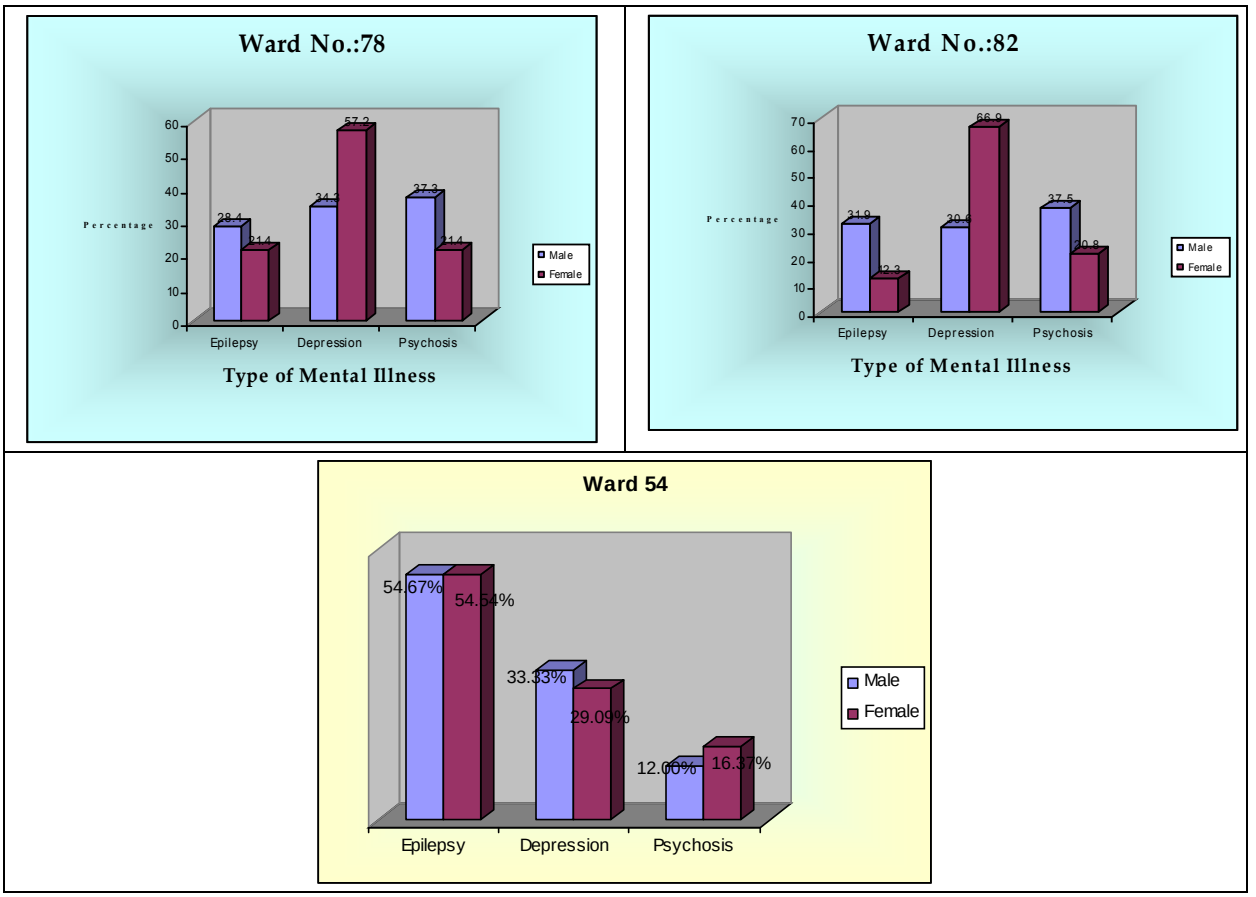


Diagram 4.6 Prevalence of Mental Illness in different wards (sex-wise division)

The table shows that in ward no 3, 78 and 82 the percentage of depression is quite high. Epilepsy is on higher side in ward 29 and 54. The major factors responsible for depression were broken love affairs and unemployment as observed in the study.

Table no 4.8 Source of Treatment: (Multi-responses)

Sources	Ward 3	Ward 29	Ward 78	Ward 82	Ward 54
Community Mental Health Care Centre	2	2	5	13	12
NGO Health Centre	1	0	1	1	1
Govt. Hospital	157	124	124	141	92
Private Hospital	81	43	62	62	41
Primary Health Centre facility	29	57	41	24	15
Others	1	0	0	1	6
Did not take any treatment	50	35	38	15	6

Multi Responses

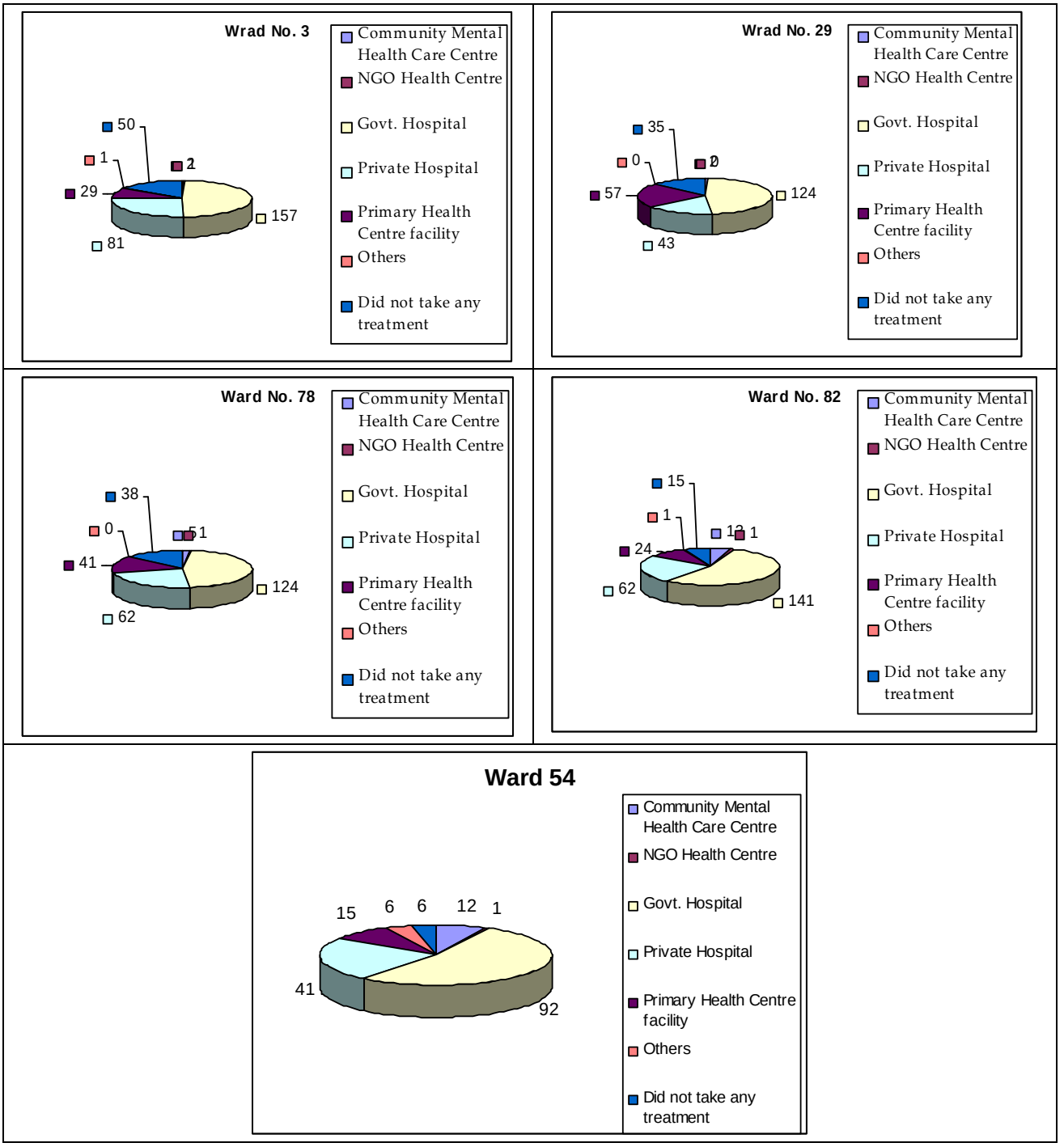


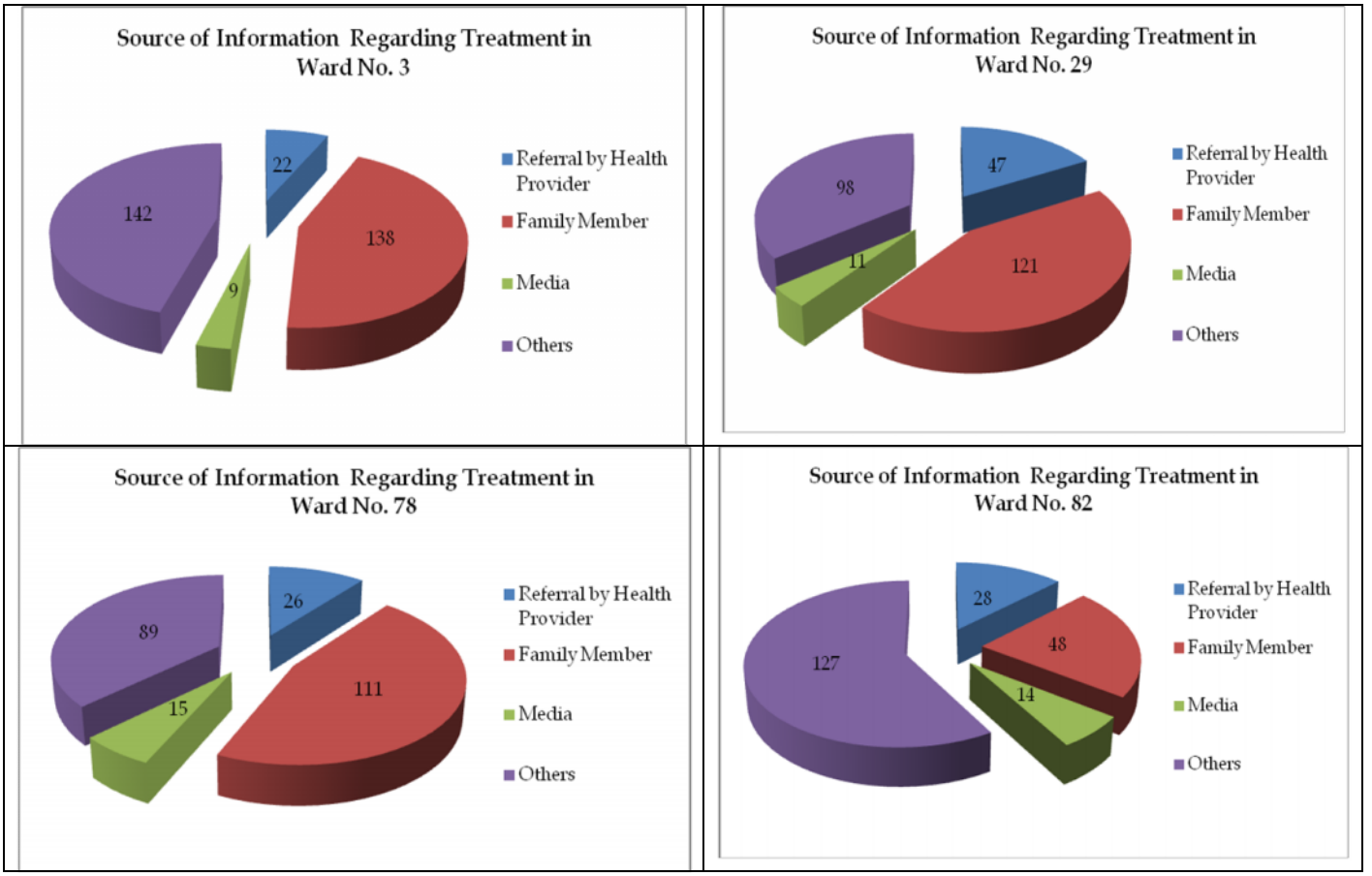
Diagram: 4.7 Source of Treatment: (Multi-responses)

The respondents receive treatments for mental illnesses from various sources. Most of these respondents visit Govt. hospitals for treatment. Some of them also visit private hospitals and Primary Health Centers of the locality. Some of the respondents visit traditional healers at the community level which they consider can get them cured. This

practice of magico-religious treatment is observed in all the wards. Very few respondents (1%) each from these wards have received treatment from NGO health center; however in Ward no. 29 none of the respondents have ever visited any NGO health centre. The table shows that a significant no. of respondents has never accessed any treatment for their mental illness.

Table no 4.9 Source of Information regarding Treatment: (Multi-responses)

Sources of Information	Ward 3	Ward 29	Ward 78	Ward 82	Ward 54
Referral by Health Provider	22	47	26	28	10
Family Member	138	121	111	48	44
Media	09	11	15	14	16
Others	142	98	89	127	78



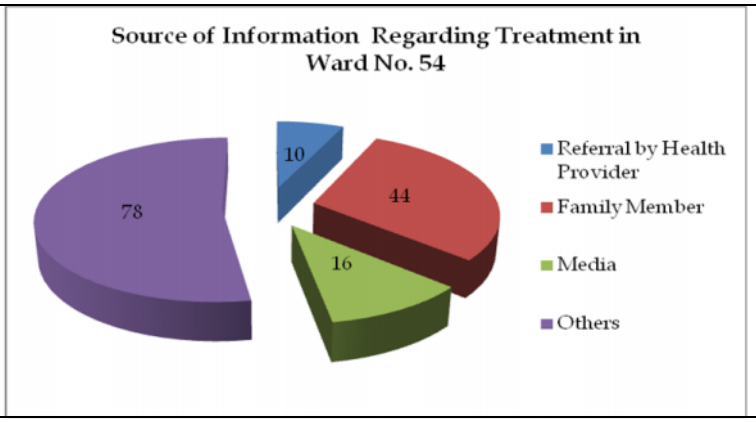
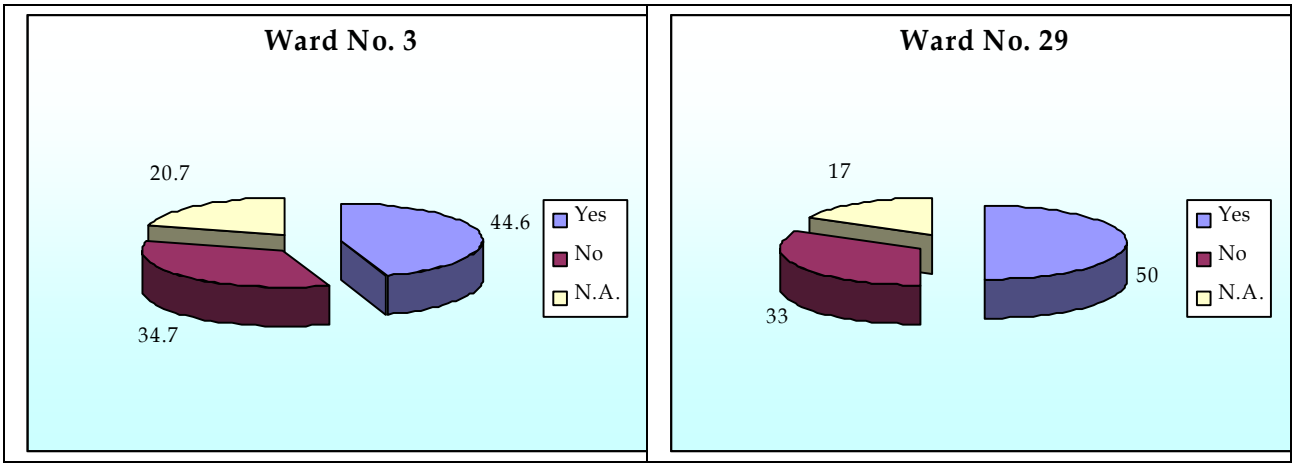


Diagram: 4.8 Source of Information regarding Treatment: (Multi-responses)

The main source of information regarding different types of treatment facilities is gathered from the family members. They also get a good amount of information from various other sources. The information from media regarding the mental health issues is not very widespread. Some of them also get information about the treatment of mental illness from the health workers as well as from their acquaintances. But as the mental health facilities are not available in WHUs they have no other options but to go to the Govt. hospitals. As these hospitals are city based so distance does not matter.

Table no 4.10 Satisfaction after Treatment:

Satisfaction	Ward 3 (N=192)	Ward 29 (N=165)	Ward 78 (N=162)	Ward 82 (N=187)	Ward 54 (N=130)
Yes	108 (44.6%)	100 (50%)	101 (50.5%)	144 (71.3%)	92 (70.76%)
No	84 (34.7%)	66 (33%)	62 (31%)	39 (19.3%)	32 (24.62%)
Not Applicable	50 (20.7%)	34 (17%)	37 (18.5%)	19 (9.4%)	6 (4.62%)
Total	**242**	**200**	**200**	**202**	**130**



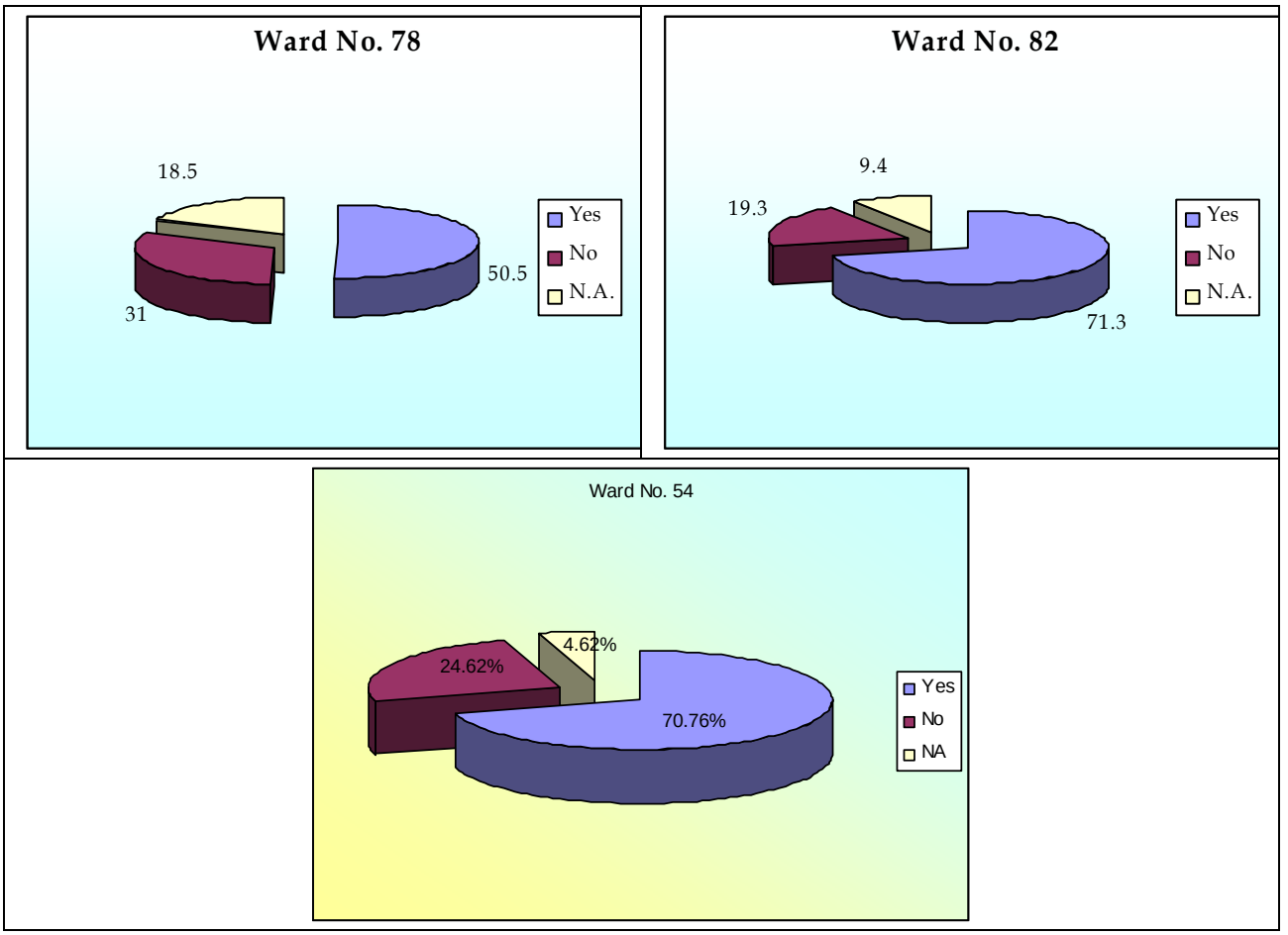


Diagram: 4.9 Satisfactions after Treatment

A sizeable section of the respondents (56.8%) in ward no 3, 61.1 % in ward no 78, 62% in ward no 29, 70.76% in ward no 54 and 79.1% in ward no 82 are satisfied with the treatment provided in respective treatment centers. It is about one-third of the respondents in all the wards were dissatisfied with the treatment received.

Table no 4.11 Whether Distance Creates Problems:

Distance creates problems	Ward 3 (N=192)	Ward 29 (N=165)	Ward 78 (N=162)	Ward 82 (N=187)	Ward 54 (N=130)
Yes	35 (14.4%)	73 (36.5%)	52 (26%)	65 (32.2%)	47 (36.15%)
No	157 (64.9%)	93 (46.5%)	111 (55.5%)	118 (58.4%)	77 (59.23%)
Not Applicable	50 (20.7%)	34 (17%)	37 (18.5%)	19 (9.4%)	6 (4.62%)
Total	**242**	**200**	**200**	**202**	**130**

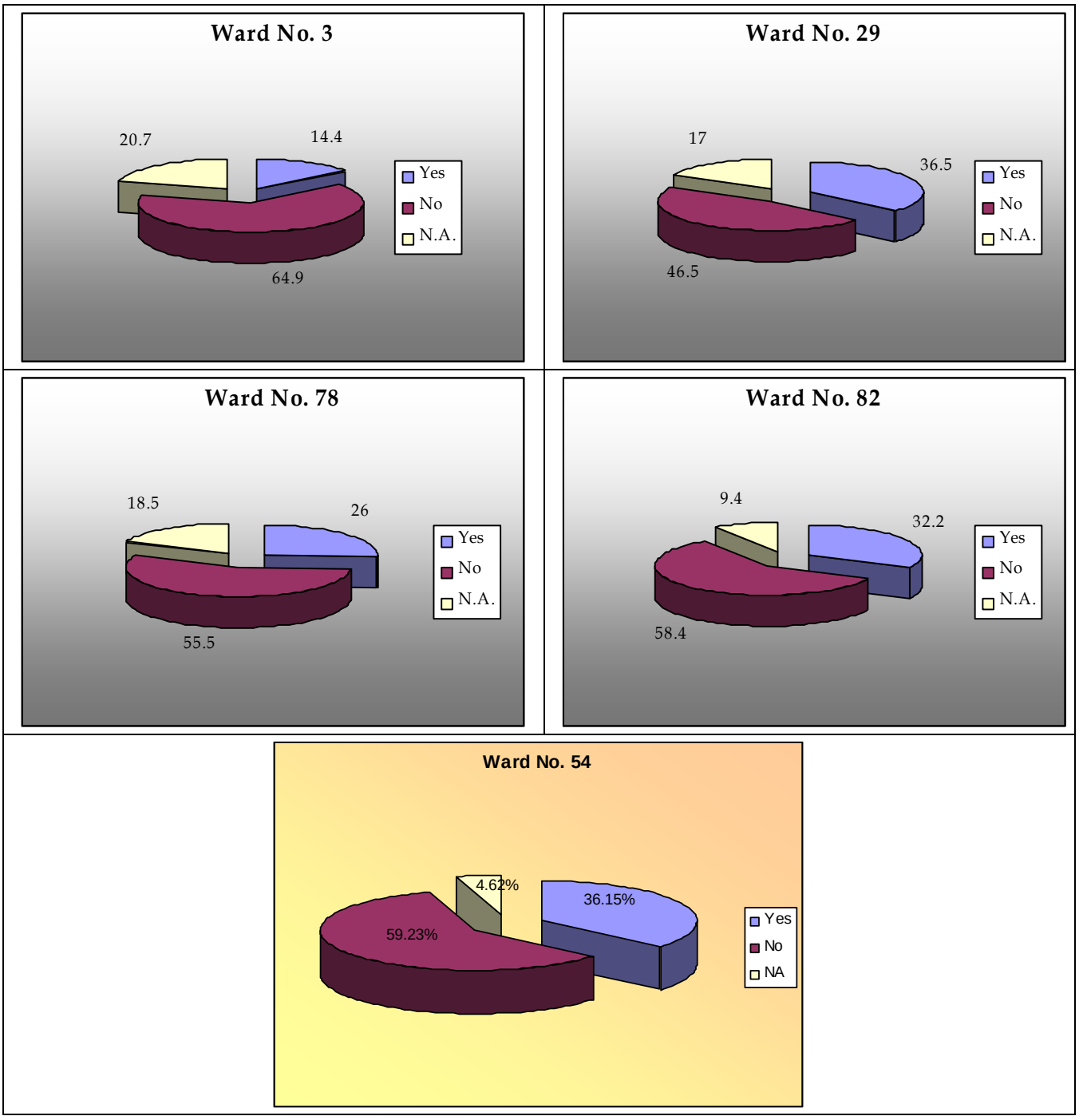


Diagram: 4.10 Distance creates Problems

The distance of the WHU creates problem for 32.2% respondents in ward no 82, 26% in ward no 78, 36.5% in ward no 29, 36.15% in ward no. 54 and 14.4% in ward no 3. It was not found to be problematic for 64.9% of respondents of ward no 3, 46.5% respondents of ward no 29, 55.5% respondents of ward no 78, 58.4% respondents of ward no 82 and 59.23% in ward no. 54.

Bilas,18yr old, fell in love with a girl, but the relation broke, the boy could not take the stress, after some days he was missing and when searched, was found loitering near Barrack pore, diagnosed as suffering from depression (Ward no.82)

Ignorance is a menace in the sample group which was very commonly observed. Initially they remain ignorant about the illness until and unless the person becomes totally dysfunctional then only they can understand about it and goes to the doctors. They visit the WHU first but with futile effect as they are being referred to the hospitals. But their too they fail to continue the treatment as they do not find any magical result as is prominent in case of any physical illness.

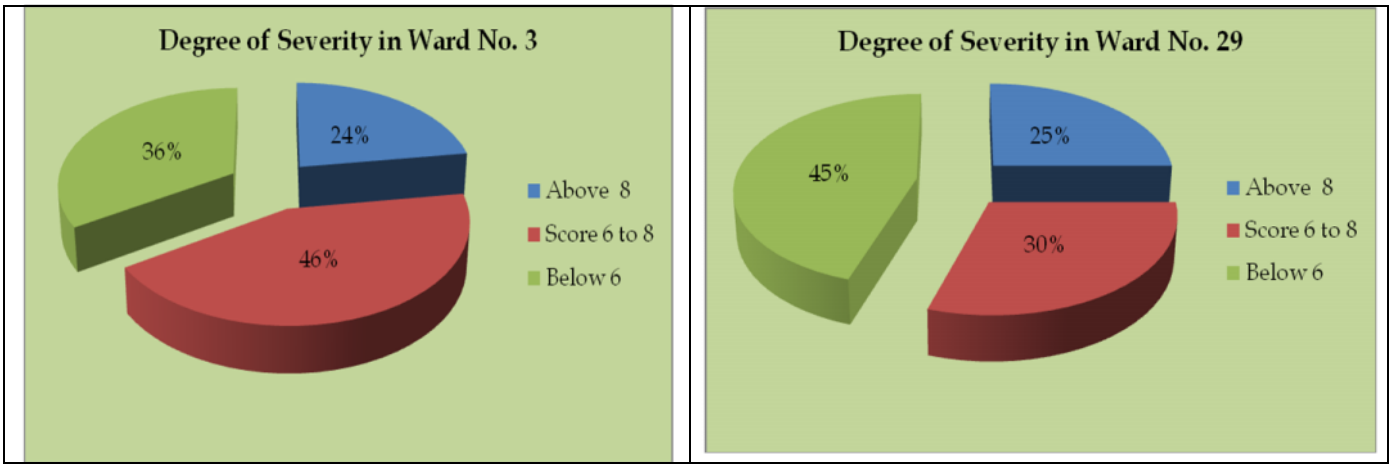
Samir, is suffering from brain damage since the age of 4 yrs, initially he was treated but due to financial deprivation his treatment is presently discontinued. (ward no 29)

Table No. 4.12: Severity of Mental Illness as reflected by GHQ12:

A Comparative chart to show the degree of severity of mental illness among the respondents in the five Wards of KMC as reflected by GHQ12:

Categorization	Ward no 3	Ward no 29	Ward no 54	Ward no 78	Ward no 82
Above 8	12 (24%)	18 (25%)	12 (24%)	18 (35%)	9 (16%)
Score 6 to 8	20 (46%)	21 (30%)	15 (31%)	17 (33%)	24 (43%)
Below 6	18 (36%)	32 (45%)	22 (45%)	16(31%)	23 (41%)
TOTAL	**50**	**71**	**49**	**51**	**56**

(Annexure – XII: GHQ Score)



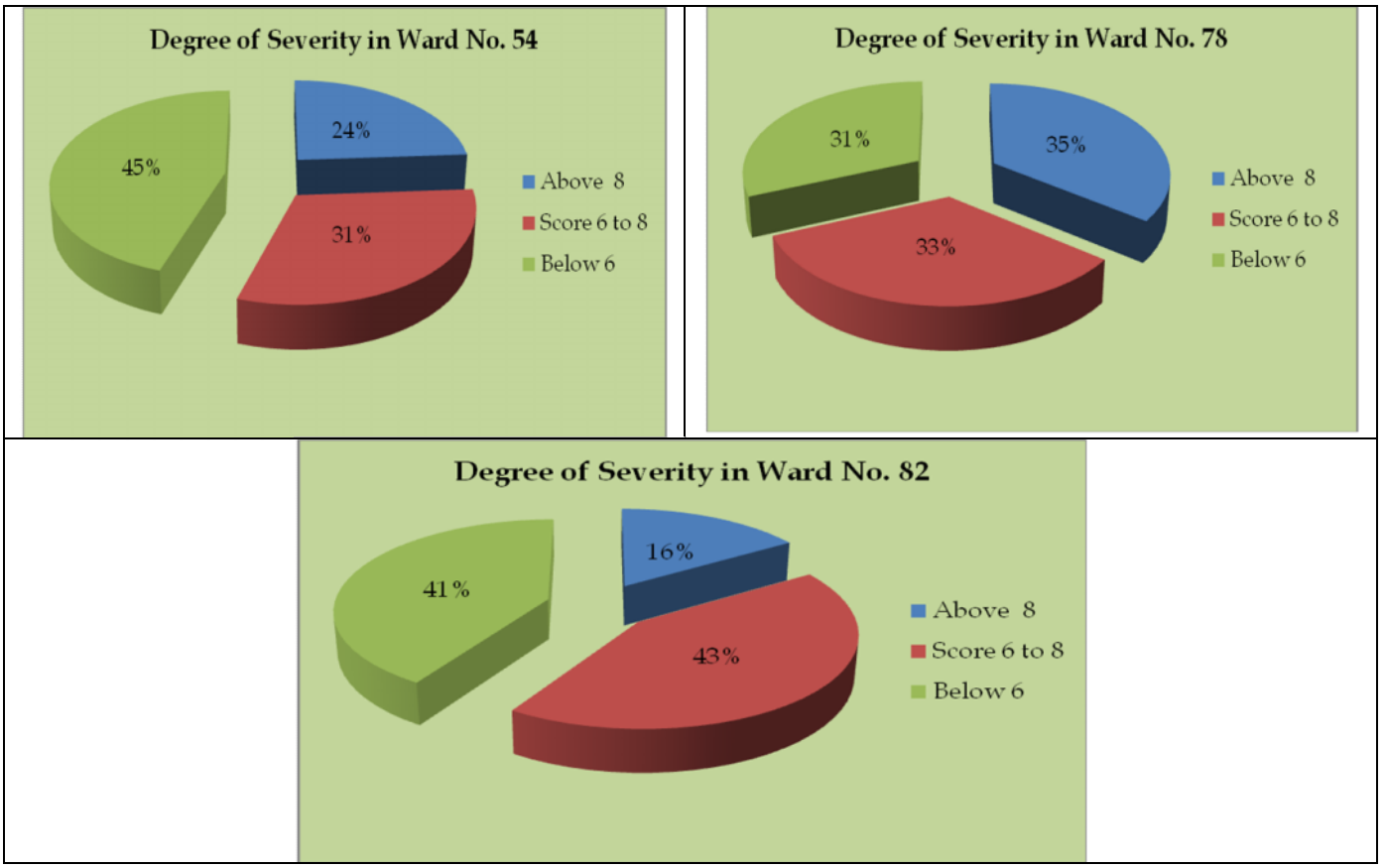


Diagram 4.11: Degree of Severity of Mental Illness among the Respondents as per GHQ 12

GHQ12 is a self administering questionnaire that evaluates the present health status of the individual as perceived by him. It consists of 12 questions based on general health. It is to be remembered that it is a screening test. Patients who came to WHU were selected randomly and the test was administered on them. It was observed that most of them come with physical symptoms without recognizing their mental status. But ultimately many of them are found to be having mental illness. As a result their overall health suffers. According to the standard norm of GHQ12 the degree of severity was determined. The norm is as follows:

Score	Degree of Severity
Above 8	**Moderate to Severe**
Between 6-8	**Mild to Moderate**
Below 6	**Threshold**

Note: Ward wise total score is given in the Annexure

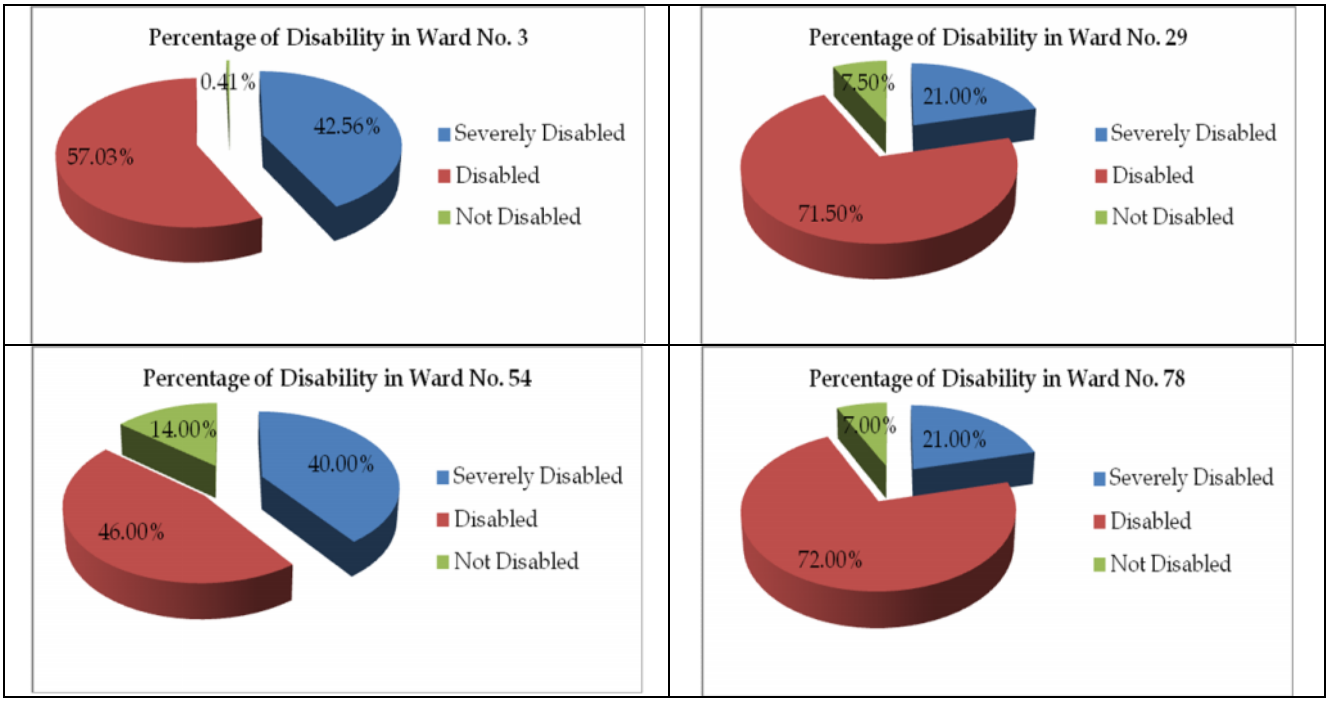
The above table shows that in almost all the wards the degree of severity of mental illness ranges from 30% to 46%. In respect of case ness i.e., when the score is within 6 to 8, the respondents in ward no 3 suffer most as 46% of such cases are observed in this

ward. Approximately, 35% of severe cases are found in ward no 78 which is more than the other wards. However, in ward 54 and 29 the mild cases were found to be more than the severe cases. This may be because Iswar Sankalpa provides some preliminary aid in these wards in respect to mental health. The chart reflects that about one-third of the respondents had mild to severe mental illness of some or the other type in ward nos 29, 54, 78 and more than 40 percent in ward nos 3 and 82.

Table No. 4.13: Extent of Disability as reflected through WHO DAS 2.0:

A comparative chart to show the percentage of disability due to mental illness as reflected by the scores of WHO DAS 2.0:

Categorization	Ward no 3		Ward no 29		Ward no 54		Ward no 78		Ward no 82	
	No	%	No	%	No	%	No	%	No	%
Severely Disabled	103	42.56%	42	21.00%	52	40%	42	21%	40	20%
Disabled	138	57.03%	143	71.50%	60	46%	144	72%	130	64%
Not Disabled	1	0.41%	15	07.50%	18	14%	15	7%	32	16%
Total	242	100%	200	100%	130	100%	201	100%	202	100%



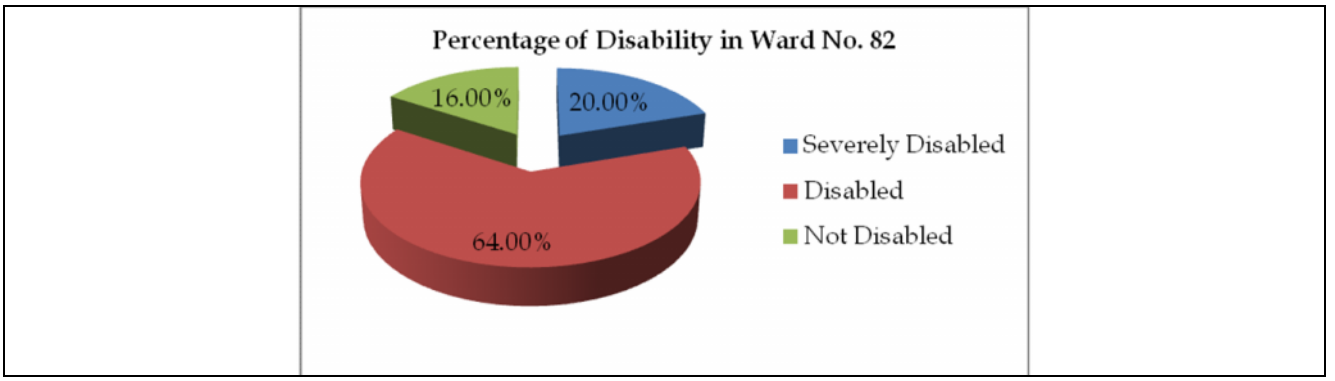


Diagram 4.12: Percentage of Disability due to Mental Illness as per WHO DAS 2.0

In this research the WHO DAS 2.0 was used to find out the percentage of disability. WHO DAS 2.0 normally has three versions; 36 items, 12 items and 12+24 items; the last being the latest. In this research the latest version was used **(Annexure – XIII: WHO DAS Score)**. However, the standardized Indian norm of this version could not be availed of. Therefore to find out the percentage of disability the following procedure was adapted:

The total scores of all the 6 domains were calculated for each data. Next, from each ward 40 total scores were randomly selected. From these total 200 scores a mean and standard deviation was calculated. From this a range was found out (mean +_ S.D). Then the scores which are below the range were interpreted as having no disability; those falling within the range are having disability and the scores which are above the range are interpreted as having maximum disability.

Mean	**73.35**
S.D	22.78
Range	50.57 to 96.13

The above comparative chart indicates that approximately more than 50% to 75% of the respondents were having disability in almost all the wards. Though, severe disability is observed in a varying percentage.

It is observed from table 4.13, extent of disability is very high in Ward 29 and 78 (72%), whereas it is moderately prevalent in ward 54 (46%), which supports the findings of GHQ12.

The above two comparative charts establishes that degree of severity as reflected from GHQ12 is proportional to the percentage of disability as obtained by WHO DAS. The maximum percentage of severity is observed within the range of moderate to severe and consequently the degree of disability is also the most. Therefore it can be concluded from this that the burden of mental illness on these people and their families are maximum.

It is felt that the need to analyze the scores of the domains of WHO DAS 2.0 to get a more prominent picture of the degree of disability caused by mental illness to the respondents. Therefore following the previous method a range was found out for each domain. The mean, S.D and range of the 6 domains are given below:

Table: 4.14: Calculation of Mean, S.D & Range of different Domain:

DOMAINS	MEAN	S.D	RANGE
Understanding & Communication	13.05	4.29	8.76-17.34
Getting around	8.92	3.49	5.43-12.41
Self care	5.6	2.16	3.44-7.76
Getting around with people	8.09	3.0	5.09-11.09
Life activities	22.25	7.24	15.01-29.49
Participation in society	19.43	6.54	12.89-25.97

It was assumed that the scores which were within the range had difficulties in the domains mentioned, the scores which were above the range had severe difficulties. The comparative charts for each domain in respect to each ward are given below:

Table: 4.15: Domain-1: Understanding & Communication in different wards

Categories	Ward 3	Ward 29	Ward 54	Ward 78	Ward 82
Above the range	73 (30%)	32 (16%)	51 (39%)	36 (18%)	116 (57%)
Within the range	162 (67%)	153 (77%)	67 (52%)	151 (75%)	58 (29%)
Below the range	7 (3%)	15 (7%)	12 (9%)	14 (7%)	28 (14%)

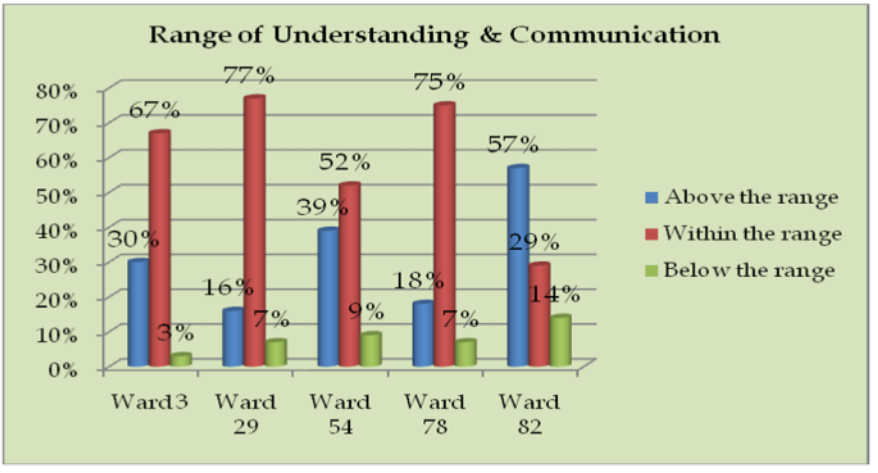


Chart 4.13: Range of Understanding & Communication in different wards

Table: 4.16: Domain-2: Getting Around in different wards

Categories	Ward 3	Ward 29	Ward 54	Ward 78	Ward 82
Above the range	74 (31%)	46 (23%)	31 (24%)	126 (63%)	29 (14%)
Within the range	164 (67%)	150 (75%)	86 (66%)	63 (31%)	143 (71%)
Below the range	4 (2%)	4 (2%)	13 (10%)	12 (6%)	30 (15%)

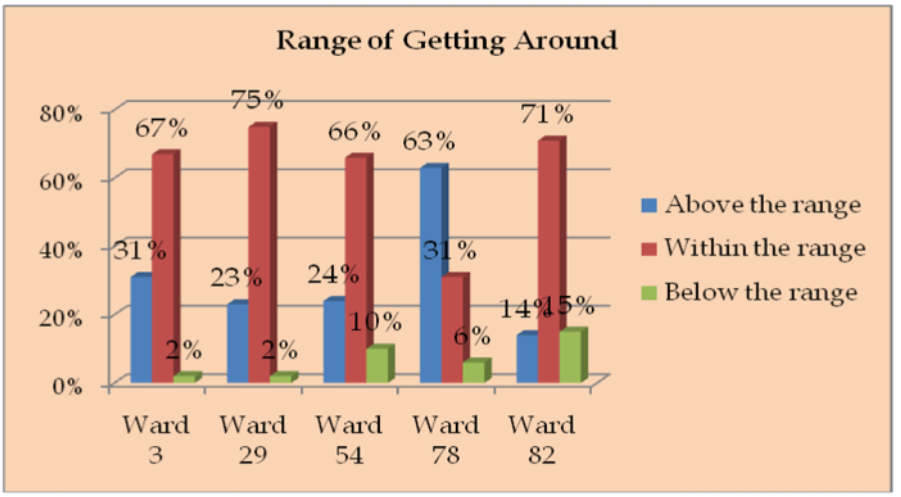


Chart 4.14: Range of Getting Around in different wards

Table 4.17: Domain 3: Ward wise distribution of Self Care

Categories	Ward 3	Ward 29	Ward 54	Ward 78	Ward 82
Above the range	104 (43%)	38 (18%)	42 (32%)	28 (14%)	22 (11%)
Within the range	135 (56%)	172 (82%)	77 (59%)	164 (82%)	154 (76%)
Below the range	3 (1%)	0	11 (9%)	9 (4%)	26 (13%)

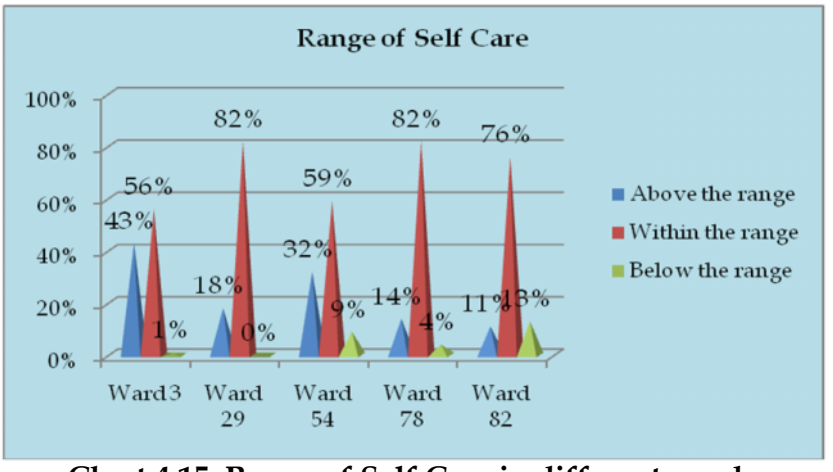


Chart 4.15: Range of Self Care in different wards

Table 4.18: Domain 4: Ward wise distribution of Getting around with people

Categories	Ward 3	Ward 29	Ward 54	Ward 78	Ward 82
Above the range	101 (42%)	64 (32%)	39 (30%)	63 (27%)	17 (9%)
Within the range	137 (56%)	122 (61%)	78 (60%)	147 (64%)	140 (69%)
Below the range	4 (2%)	14 (7%)	13 (10%)	21 (9%)	45 (22%)

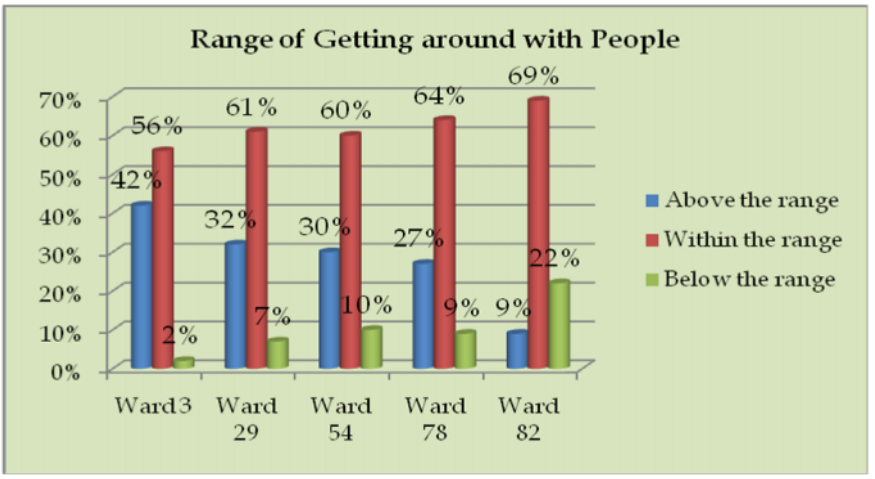


Chart 4.16: Ward wise distribution of Range of Getting around with people

Table 4.19: Domain 5: Life Activities in different wards

Categories	Ward 3	Ward 29	Ward 54	Ward 78	Ward 82
Above the range	61 (34%)	47 (24%)	32 (25%)	36 (18%)	35 (17%)
Within the range	110 (61%)	135 (68%)	76 (59%)	145 (72%)	133 (66%)
Below the range	9 (5%)	18 (8%)	22 (16%)	20 (10%)	34 (17%)

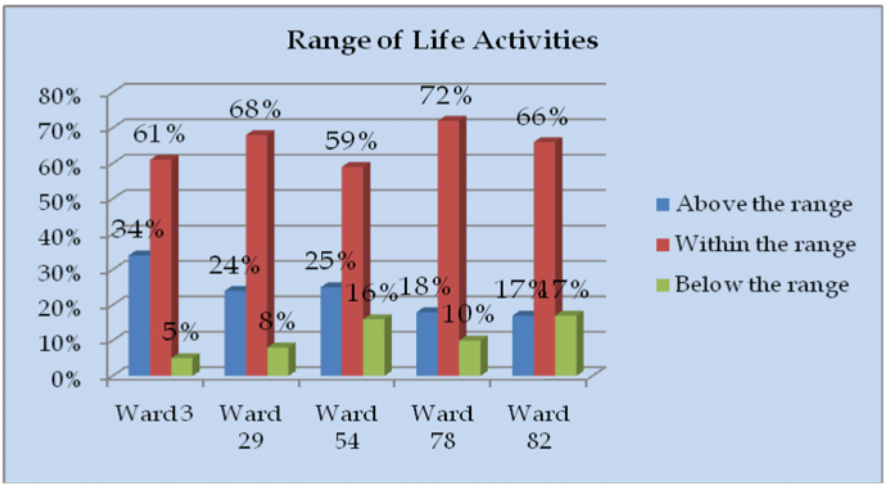


Chart 4.17: Range of Life Activities in different wards

Table 4.20: Domain 6: Ward wise distribution of Participation in Society

Categories	Ward 3	Ward 29	Ward 54	Ward 78	Ward 82
Above the range	93 (38%)	34 (17%)	93 (72%)	12 (6%)	33 (16%)
Within the range	149 (62%)	159 (80%)	21 (16%)	182 (91%)	155 (77%)
Below the range	0	7 (3%)	16 (12%)	7 (3%)	14 (7%)

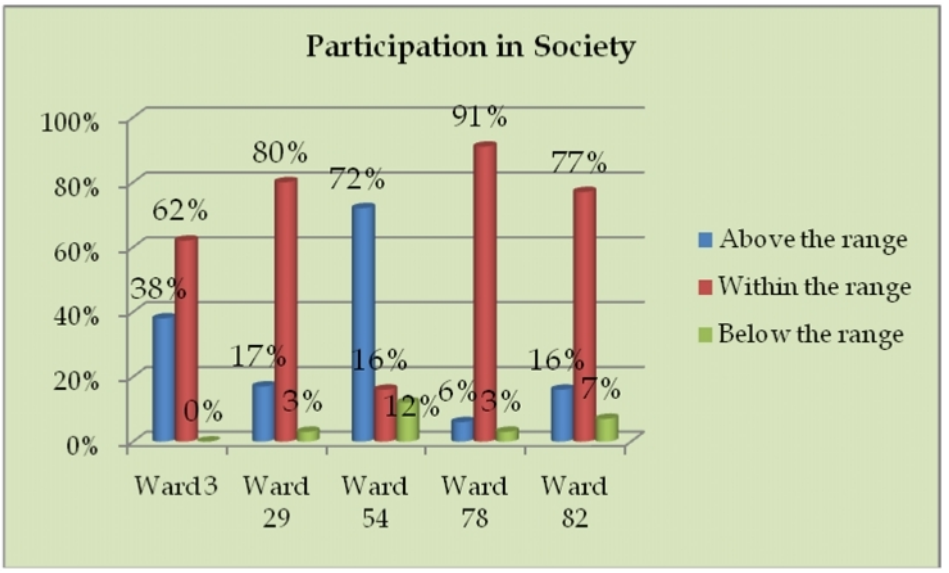


Chart 4.18: Range of Participation in Society in different wards

It may be mentioned in this context that in a mentally ill person his cognition, socialization and communication primarily gets impaired, and the degree of impairment is largely conditioned by the degree of disability caused due to the illness. In an individual who suffers from neurosis the cognition is intact in most of the cases but his participation in the society, his life activities, self care, getting along with others, gets influenced by the symptoms of the disease. For example if a person is suffering from neurotic depression then he would not show much interest in socializing with others, his life activities would decelerate and he would not take much interest in self grooming, though his cognition will not face much impairment in terms of insight and self orientation but some other aspects of cognition like understanding the situation logically, attention and concentration would definitely suffer. But the prognosis of such cases is better than psychotic cases. As in Schizophrenia the person loses contact with the reality and therefore does not even understand that he is suffering from some disease. From the six domains of this tool, the extension of impairment in these areas can be understood to some extent, if not much vividly.

The comparative charts reflect that percentage of scores falling below the range in almost all the domains is very low. This implies that if there is mental illness then there

would be some amount of impairment in these areas. If these scores are matched with the scores of degree of disability then it would be observed that the corresponding total scores would also fall below the range.

In all the domains, majority of the scores fall within the range signifying the fact that the individuals who have M.I are impaired in all the six domains as well. However, in the domain of **"understanding and communication"** maximum impairment is noticed in ward 29(78%) and 78(75%). In the domain of **"getting around in different wards"** it is observed that about three-fourths of the respondents in ward nos 29 and 82 and about two-thirds in ward nos 3 and 54 were within range and impaired. In the domain of **"self care"** majority of the respondents in all the wards especially in ward no 29, 78 and 82 experience some kind of problems**.** In the domains of**" getting around with people"** and**"life activities**", respondents of ward no 78 are the worst sufferer with a 73% and 72% of impairment in each domain respectively. 80% of impairment has been observed in the domain of **"participation in the society"** in ward 29.

Therefore, from above interpretation it can be concluded that vulnerability in terms of impairment in the above mentioned domains has its consequence in varying degrees in all the wards under study and the conditions are more pronounced in ward nos 29 and 78. However, the significance of this analysis lies in the fact that it would help in planning the intervention

While summing up the procedure we can say that GHQ12 was used to screen the percentage of mental illness. Then WHODAS 2.0 was used to find out an approximate percentage of disability caused due to mental illness.

Summary Findings:

- The demographic profile indicates that the respondents belong to almost all the age groups; most of them were from the early and late adulthood stage, though some young adults and old population constituted the group as well. There were more male than female among the mentally ill persons;
- An overwhelming majority (75%) of people in ward no 82 and 3 were Hindu. Muslims dominate in the other three wards 29(69%), 54(55%) and 78(80%);
- The marital status indicates that most of the respondents were unmarried(48%), many were married(44%), 7 percent widow and a few were divorced and separated;
- On an average 73 percent of the respondents were mostly unemployed (73%), some of them were house wives and some were paid workers. The ward wise unemployment rates were 3(73%), 29(68%), 54(67%), 78(78%) and 82(70%). A small percent(17%) were employed on average from these wards;

- Most of the respondents were unemployed (73%) remain unmarried (48%) because of their illness. Since employment and marriage are the two important life events which can become stressors and lead to mental illness;

- They seek medical help for mental complaints at a later stage, when it becomes unmanageable for them. Most of them are referred to government hospitals for treatment and they were satisfied with the treatment. Majority of the respondents in ward no 3(65%), 29(62%), 54(70%), 78(62%), 82(70%) availed treatment from Govt. hospitals. Their source of information is mainly family members and others like friend etc. Many get information from multiple sources. Distance is not a problem for most of them. However it was observed that non governmental support regarding mental health was not available to them;

- More than half of the respondents(56%) expressed satisfaction with the treatment in Govt hospitals;

- The GHQ12 data obtained from the various wards indicate that from among the patients who visit the WHU more than 65% come with mental illness. In almost all the wards the degree of severity of mental illness ranges from 30% to 46%. In respect of case ness i.e., when the score is within 6 to 8, the respondents in ward no 3 suffer most as 46% of such cases are observed in this ward. Approximately, 35% of severe cases are found in ward no 78 which is more than the other wards.

- Among the respondents, 26 percent suffer from Epilepsy, 44 percent from Depression, and 30 percent from Psychoses. The gender wise distribution shows that among them 51percent were male and 49% female. Among the total respondents suffering from Epilepsy (253) across the wards, 59 percent were male and 41 percent female. Among those who were suffering from Depression (431), 35 percent were male and 65 percent female. Among the Psychosis patients (290), 62 percent were male and 38 percent female;

- Failure in love affairs and unemployment were the most cited factors of depression;

- Vulnerability in terms of impairment in the domains studied has its consequence in varying degrees in all the wards and the conditions are more pronounced in ward nos 29 and 78. However, the significance of this analysis lies in the fact that it would help in planning the intervention

CHAPTER – V

Observations from Discussions with various Stakeholders

This chapter represents views of important stakeholders like doctors, health workers and community people about their understanding and views on various types of mental illnesses. The causative factors leading to such diseases, status regarding delivery of mental health care services and problems in accessing the services are also stated here. The information collected is the outcome of KIIs with service providers and Focus Group Discussions (FGD) in a cross section of multi-cultural people living in these areas. In a number of such discussions, the community people participated encouragingly in group deliberations. This chapter presents an overview of the magnitude of problems faced by the community in accessing mental health care services in their area particularly in slums.

5.1 Observations from FGD with the Community people:

- Focus Group Discussions (FGD) with community people on health issues revealed that the families have an indifferent attitude towards personal hygiene due to lack of awareness about health, personal hygiene and sanitation. Many of them work in unhealthy, hazardous conditions and lag nutritious food. Infectious diseases such as TB are also common as a result of this lethal combination of poor nutrition coupled with unsanitary living condition. It was perceived from the FGDs that in almost all slums unhygienic condition are predominant and slum dwellers are forced to stay having no option for a little better life. They mostly complained about headaches, giddiness and palpitation, which can be due to anemia among them;

- Their settlements were found to be close to the residential areas so that the female members can work as domestic help in those residences. This particularly is evident in ward no 82;

- The community people particularly mothers of adolescents complained that substance abuse among male population is on the rise. This is more pronounced among the children who were working and staying away from their home. The substance abuse among them establishes the fact that these drugs are available in the nearby place and the people could easily access them. The drug intake also explained the fact that why a sizeable section of them suffered from chest ailments, skin diseases, diseases due to malnutrition, and various forms of substance induced violence. In most cases they are not referred to specialized centres for counselling and treatment for de-addiction owing to lack of awareness about such services. This indicated that intervention is needed to develop ways to target the substance habits of local people living in urban slums;

- The trend of accessing health care behaviour of slum dwellers shows that for minor ailments like fever, cold and cough they approach the ward health clinics for treatment. Their belief in traditional healing practice may be conditioned by their ignorance about modern health care practices and along with their inability to afford costly medicines of allopathic doctors and their high consulting fees. The residents of Tantibagan lane in ward no 54 admitted that they visit quacks or consult the salesman at the local pharmacies for medicines. Homeopathy, being relatively cheaper is popular among the slum dwellers. They visit hospitals and other private M.B.B.S. doctors only in case of emergency while patient is in a moribund stage and it is a sheer necessity. Awareness about HIV/AIDS, reproductive child health, personal hygiene etc. is low among them. It emerged from the discussions with the slum women that their health seeking behavior is often paralyzed by their poor capacity to afford the costly medical care. *"Each day we spend at home due to illness or in going to the OPDs of Government Hospitals –- our day's earning is lost"* reported a women at Belgachia slum;

- It came out from discussions with the people in almost all the slums that they face tremendous difficulty in getting admission in case of emergency even in government hospitals. This is largely because of weak or poor referral system, they alleged;

- FGDs with the community revealed that their awareness about causes, symptoms, treatment approaches and facilities for mentally ill persons is very poor. Often there is a delay in seeking treatment. The mentally ill are brought to the hospital years after the onset of illness. By that time social disabilities had set in. Due to misconceptions associated with mental illness, a large segment of population still resort to magico-religious treatment. Misconceptions mainly develop from their strong belief that 'illnesses are results of sins of past life'. A woman whose eight year old daughter is mentally ill in Kasai Bustee Second Lane in Ward No. 29 believed that "*No medicine can cure my daughter; It is Allah's grace that can only cure my daughter. I use to take my daughter to pirbabar majar every year for relief and cure*". Notwithstanding the community's faith in traditional healing practices, there is a cross section of the community people in all the wards who believe that illnesses take place because of anxiety and tensions and the ill person may be transferred to hospitals as religious leaders, ojhas and gunins will not be of much help. People in ward no-82 cited a case to establish why hospital treatment was important:

Change of attitude towards hospital treatment

- A newly married wife who did not get much attention and care from his husband for some reason suddenly started behaving unnaturally. Her in-laws took her to a religious healer, where she was subjected to cruelty and physical torture and she did not recover. One day they took her to the hospital. Presently she is in a better condition.

- A young boy who was suffering mental illness left his home and started moving around in the nearby locality. On being properly guided by the field workers of Iswar Sankalpa, the boy was taken to the doctor for treatment. Presently the boy is recuperating.

- On the onset of mental illness, community members react in different manners with views ranging from *'sin committed in earlier life'* to *'failure in love affairs'*. In ward no 54, the people cited a case how failure in love can cause mental illness:

Failure in love as a stressor…..
Susmita (name changed) is a 20 years old student, studying Philosophy (Hons) in Calcutta University. Susmita belongs to low socio-economic status. Her father, Sudhendu Dhar, is a retired person and mother, Madhuri is a house wife. She has an elder brother.

During her high school period, she had an affair with a classmate. She described the relationship as warm and supportive. But the relationship did not continue for long. From the interview she revealed that she was very much emotionally attached to the boy and had a psychological break down after the relationship tore apart.

Presently she has lost interest in all her activities including her studies and does not want to pursue it. She is not even interested in self grooming activities. Her parents reported that she exhibits abnormal behavior like unnecessary shouting and even undresses in front of other family members. Her elder brother quite often beats her for all these. Her family history revealed that her father is also suffering from depression. She was taken to NRS hospital and SSKM hospital but there was no improvement. The treatment was discontinued. As a result she is not even getting a chance to recover.

- It was revealed from the discussions that many of the mentally ill persons who ultimately come to hospitals for treatment do not continue for long. The drop out rate is high among the poor patients. People of Mominpur Road in Ward No. 78, 21 no bustee in Ward No. 3 and Ismile street in ward no 54 informed that they often default in taking drugs. The people of all slums are equally ignorant about psychological support facilities available in the city; **(Annexure – X & XI)**

- Besides lack of awareness, the incapacity of the people has been a major problem to the slum dwellers of Ward No 78. They believe these patients can get treatment from hospitals but because of poverty it is difficult to continue the long treatment process. Lack of awareness also creates complicated situation. People expressed their anguish and frustration on cases of wrong treatment by doctor. They referred the case of '*Lutfar has been suffering from epilepsy since she was 2 yrs of age. It first started when he was given a wrong injection. He is presently living a life of a disabled and expresses aggression and sometimes become depressed'*.

- About the role of family in providing care, support, treatment and rehabilitation of the mentally ill persons, the community had mixed feelings. While appreciating the need for family care of such persons, they admitted that they can not provide adequate care owing to stringent economic conditions. However, they felt that mentally ill members

should be kept at home because there is a fear of getting ill treatment in the hospitals. They feared that these patients can even get poisonous injection in the hospital. This reflected that they do not trust much on health care and indoor patient facilities available in local hospital. They have mistrust on infrastructure, either private or government. They mentioned that family often gets stigmatized and others look at these families either with pity or disrespect. Within the family these patients are taken care of mainly by parents, but not that much by others. On the question of marriage they said that mentally ill members are not in a position to get married either psychologically or physically, therefore they should not get married until and unless they are completely cured. Lack of employability because of disablement is a major source of agony among the community people, reported the group in *Mistripara* lane in ward no 54. As about disability, majority of them could not give any specific response. To the field workers of Ward No. 82 *'mental illness is treatable in hospitals with medicine but disability is a permanent state, which can not be treated with the medicine.'*

- When asked about the currently available health care services (both general and psychiatric) in the given area, the community people mentioned the following:

Ward no-3	Ward no-29	Ward no-78	Ward no-82	Ward no-54
▪ R.G.Kar Medical College ▪ Theism diagnostic Center, Dumdum ▪ P.G. Hospital ▪ N.R.S. medical College ▪ Gobra Mental Hospital ▪ Calcutta Medical College	▪ Gobra Mental Hospital ▪ Bangur Institute of Neurology ▪ Chittaranjan Medical college ▪ Sahib Bagan Homoeopathy Centre ▪ CMRI ▪ R.G.Kar Medical College ▪ R.K.Mission Seva Pristhan, Sarat Bose Rd	▪ Gobra Mental Hospital ▪ CMRI ▪ Bangur Institute of Neurology ▪ Missionarities of Charity ▪ P.G. Hospital ▪ Netaji Nursing home ▪ R.K.Mission Seva Pristhan, Sarat Bose Rd ▪ Prochesta	▪ Bijoygarh Jadavpur K S Roy Hospital ▪ P.G. Hospital ▪ Hastings ▪ S.N.Pandit Hospital ▪ R.N.Tagore Hospital ▪ Bangur Institute of Neurology	▪ Gobra Mental Hospital ▪ P.G. Hospital ▪ N.R.S. medical College

Conversational Interview with Ms Sandhya Das, HHW, Ward no-3
Q. What do you mean by mental health?
Ans: The person feels comfortable about himself that is he feels reasonably secure and adequate. He takes responsibility of his fellowmen.

Q. Is there any difference between mental illness and disability?
Ans: Mental illness is like delusions, hallucinations. Loss of contact with the world of reality. Disability means feeble mindedness, it may be observed at birth.

Q: What is Epilepsy?
Ans: I am not sure but it may be a mental disease which range from a slight lapse of awareness to loss of consciousness.

Q. What is Depression?
Ans: It is common to all. We suffer from depression at times. The patients remain in low spirit and feel sad. It is caused due to tension, lack of sleep and family disturbances.

Q. What is Psychosis?
Ans: It is a serious form of personality disturbance. Loss of contact with the world of reality.

Q. How are they treated here?
Ans: Since there is no facility for such types of persons, they are referred to hospitals.

Q. What problem do you face?
Ans: I have no specialized knowledge about the signs and symptoms of mental illnesses and feel incompetent to deal with such patients.

Q.What is your suggestion?
Ans: Need for training on issues relating to mental illnesses. It may be organized at the WHU in the evening hours in between 6 pm and 9 pm following a designed curriculum.

Summary Observations on Community's perception about mental illness:

- People of community are unaware of the signs and symptoms of mental illness;
- People are less concerned about mental illness as they are more concerned with earning a square meal;
- They become concerned for the patient only when he leaves home or becomes dysfunctional;
- Faith on traditional healers is still prevalent mostly among the older generation people. They often go to religious healers for treatment. Younger generation have faith in hospital treatment;
- Mental health is a stigma to many people. From the FGDs it was revealed that they would prefer to keep a distance from the ill, even when he had recovered;
- Community acknowledged supportive role of the family to help the patient recover fast;
- Economical constraints is a major deterrent in seeking long term treatment needed for mental diseases;
- They found interest on mental health issues and suggested for regular camps;
- Ban on selling of psycho-tropic substances should be strictly observed;
- Arrangements for mental health services through WHU or separate mental health clinics with facilities for professional counselling at a lower cost need to be introduced.

5.2 Observations from FGD and KII with the Health/Field Workers:

- The interviews with the HHWs reveal that they have very vague concept about mental health issues with a few exceptions like Sandhya Das, CUDP/HHW in Ward No. 3, Bibha Malakar, HHW, Ward No. 29 who had a proper understanding about the signs and symptoms of various mental illnesses. She could identify the distinction between mental illness and disability. She mentioned the first one includes delusions, hallucinations, and loss of contact with the reality, where as the disability means feeble mindedness, it may be observed at birth. When asked about the symptoms of mental illness and disability, it is observed that they lacked clear understanding of the diseases. Nor were they acquainted with the name of the diseases. By signs of mental illness, they understand *'people roaming about aimlessly'*, *'self-talking'*, *'people who are unable to take care of themselves'*, *' fail to take on personal hygiene care'*, *'no/distorted social interaction'*. As about the causes of mental illness, they mentioned that these are mostly *'hereditary'* and other factors like *'head injury'*, *'familial disturbances'* *'tensions'* etc. lead to mental diseases. It also came out from the interview with the health worker in Ward No. 79 and 54 that *'disease is caused due to presence of some insects in their brain'*. Asma Khatoon, HHW of ward no 78 said *'in disability the person lacks intelligence'*. In Ward No. 82, the HHWs informed that many women who were coming to WHU were suffering from some kinds of depression as they are subjected to some form of abuse mainly in the RLA.

- It has come out from their interviews that the mentally ill persons do not get any treatment in the WHU as there is no scope for the same. Hence the patients in the WHU are generally referred to the local hospitals for further treatment. Consequently they do not get much scope to deal with the mentally ill patients.

- HHWs in all the wards felt that Mental Health Unit needs to be established within their Wards to cater to the needs of the local population;

- They felt that all the HHWs needed training on mental health issues for effective execution of their task. The awareness needs to be spread to all level of workers to get a clear idea on the causes and consequences of various illnesses;

- A common observation which emerged for the interviews with the HHWs is that they need training to provide adequate support to these patients.

(Note: Instrument for Health / Field Workers Annexure – III)

5.3 Observations from KII with the Doctors:

The Medical Officers (MO) of all the wards under survey were interviewed and the following observations were made:

- All of them are aware of the symptoms of mental illness. The distinction between mental illness and disability was not clear to some of them;
- They were not aware about the prevalence of mental illness
- They found many mental patients in the WHU but they can not address their problems due to lack of infrastructure. Consequently the patients are referred to Psychiatry departments of Government Hospitals.
- They informed that people often come with physical symptoms but many of them were suffering from some kind of mental illnesses;
- They opined that to a large extent mental retardation can be checked by providing good antenatal care, nutrition and safe delivery;
- Mentally ill persons are not dangerous and mental hospital is not always the appropriate place to treat them.
- Paucity of time, large number of out patients, lack of mental health care facilities are some of the common problems to integrate mental health care into general health care;
- Mental health problems take a long time for diagnosis and treatment and therefore such problems cannot be handled in general practice setting;
- Treatment of mentally ill persons by the religious healers should be strongly discouraged;
- They rejected the idea that mental illness is a result of black magic or evil spirits.
- They informed that even children can develop mental illness;
- Suicidal attempts are sometimes fall out of mental illness;
- Addiction to drug is an anti social behavior but it is curable.
- They feel mental retardation can be checked to a large extent by providing good antenatal care, nutrition and safe delivery;
- Regarding the role of the family for the management of the illness they said that "mentally ill persons are burden to their family and it is the duty of the counselors to make the family members understand that it is nothing but an illness which can be cured through treatment";
- Poor economic condition and deeply ingrained faith among people on traditional healing practices are major deterrents to showcase the importance of modern methods of treatment of mental illness. Drug default is very common among poor people;

(Note: Names of the Doctors and Health Workers interviewed are mentioned in the Annexure – VI)

5.4 The M.Os of WHU Suggested the following:-

- Introduction of Psychiatry in a more extensive way in MBBS course is needed. Presently it is of not much importance to MBBS students
- In service training should be provided to the G.Ps on mental illness so that they can do the early diagnosis and refer them to the hospitals;
- Introduction of a Health Dept. in every WHU
- Appointment of Psychologist and Counselors in each WHU
- Conduct awareness camps regularly
- Sensitize the health workers
- Awareness to be done from the grass root level, every household needs to be approached;
- Organize awareness camps on mental health every month;
- Community health workers needs to be trained to sensitize community people;
- WHU should have referral directory and should maintain liaison with other line departments;
- Promote community mental health care to spread awareness among people and also to create community's responsiveness to address mental health problems at the local level;
- Psychologist and Counselor should be placed in each WHU notwithstanding poor infrastructural support of WHU;
- Mental illness can be prevented by ensuring good antenatal care, nutrition and safe delivery.

CHAPTER – VI

Major Findings

The United Nations Declaration on the Rights of Mentally Retarded Persons proclaimed the necessity of protecting the rights and assuring the welfare and rehabilitation of the mentally disadvantaged. So, this chapter presents an overview of the profile of mentally ill persons living in urban slums focusing mainly on their problems in accessing mental health care facilities. The information had been collected through interviews, Focus Group Discussions (FGD), and interviews with the key persons. This chapter presents an overview of the magnitude of problems faced by mentally ill persons in slums in the Wards covered during the survey. The findings emerged from the administration of semi-structured interview schedule, WHO DAS, GHQ, FGDs/KIIs with various categories of respondents are summed up as follows:

6.1. Profile of the mentally ill persons:

- The demographic profile indicates that the respondents belong to almost all the age groups; most of them were from the early and late adulthood stage, though some young adults and old population constituted the group as well. There were few more male than female among the mentally ill persons;

- An overwhelming majority (75%) of people in ward no 82 and 3 were Hindu. Muslims dominate in the other three wards 29(69%), 54(55%) and 78(80%);

- The marital status indicates that most of the respondents were unmarried(48%), many were married(44%), 7 percent widow and a few were divorced and separated;

- On an average 73 percent of the respondents were mostly unemployed (73%), some of them were house wives and some were paid workers.
- Most of the respondents were unemployed (73%) and remain unmarried (48%) because of their illness. Since employment and marriage are the two important life events which can become stressors and lead to mental illness;

- They seek medical help for mental complaints at a later stage, when it becomes unmanageable for them. Most of them are referred to government hospitals for treatment and they were satisfied with the treatment. Majority of the respondents in ward no 3(65%), 29(62%), 54(70%), 78(62%), 82(70%) availed treatment from Govt. hospitals.
- They seek medical help for mental complaints at a later stage when it becomes unmanageable for them. Most of them were referred to government hospitals for treatment and they were satisfied with the treatment. Their source of information is

mainly family members and others like friends, relatives etc. Many get information from multiple sources. Distance is not a problem for most of them. However it was observed that non governmental support regarding mental health was not available to them;

- As discussed earlier, families do not go for any kind of treatment until and unless the individual becomes dysfunctional. They seek treatment from the religious healers and from the doctors as well. They have asked for religious camps from the NGOs. Some said that they would like government and non governmental organizations to provided stipends for these sufferers as they will not be able to earn for their families.

6.1.1 About Prevalence of disorders

- Psychoses which mainly include Schizophrenia and Manic Depressive Psychoses are prevalent among the respondents. The symptoms of psychoses are not noticed at the initial stage due to lack of awareness. As a consequence the disease gets accentuated;

- Depression is also very common in the wards. It is observed that in ward no 3, 78 and 82 the percentage of depression is high. The major causes of depression can be attributed to broken love affairs and unemployment.

- Incidences of Epilepsy are more in ward 29. This is also due to lack of awareness among the local people regarding the prenatal care. Causes like malnutrition being the most prominent.

It needs to be mentioned here that the prevalence of disorders given above is based on the already diagnosed cases observed while field work. It was not possible to show the exact degree for the different types of mental illness which is prevalent among the community with WHO DAS 2.0. However the tool has highlighted on the fact that the degree of disability for the different kind of M.I ranged from moderate to severe on the basis of the severity of the illness. At the same time it has also reflected that due to the illness maximum impairment is observed in understanding, cognition, mobility, life activities, self care and socialization, thereby making the person totally dysfunctional.

6.1.2 Current access and barriers to care for these people

- Ignorance is the fundamental problem of mental illness. Many people believe that mental illness is because of black magic and for that they take the patient to religious healers. But when they realize about the significance of the problem it becomes too late. They go to doctors in WHU after a long time where due to infrastructure is

lacking and the patients are referred to Government Hospitals. As it is a long term treatment and needs patience the treatment is often discontinued.

- Apart from the WHUs any other kind of mental health support programmes were not found in any of the wards barring some interventions of Iswar Sankalpa. It was observed during the visits more emphasis was given on the physical health, which too is important but a similar concern should be shown to mental health care which is equally agonizing.

6.1.3 Skills of WHU Personnel

The MOs are aware of the mental illness but their knowledge would be of no use unless and until the infrastructure is upgraded. Except the doctors, other health staffs are not properly aware of the signs and symptoms of mental illness. Some of them even used the term '*Pagol*' (mad) to describe the mentally ill, which brings out the appalling situation of health care for the mental patients.

6.2. Views of the Community on Mental Illness

6.2.1 Causes of Mental Illness:

- Community people consider unemployment, family tensions, financial problems, failure in love affairs are common causes of mental illness. Sometimes if a person does not get married at the right stage of life then s/he might develop depression. Many felt that mental illness is the consequence of sins or wrong doings of past life. This resulted from the FGDs and informal interviews with community people.

- As physical illnesses are common and mostly seen, people have a casual attitude towards them. They know that a person will recover from such an illness after medication. But they have a feeling that mental illness means becoming "mad" and people do not completely recover from that state. Specifically a person becomes dysfunctional and cannot even take care of him. Most significantly he loses his productivity in the family especially in terms of wage earning capacity.

6.2.2 Health Seeking Behaviour

- The pattern of health seeking behavior of slum community shows that minor ailments such as fever, cold and cough are mostly treated by the ward health units (WHU). Their belief in traditional practice of healing for mental illness may be conditioned by their ignorance about modern health care practices along with their inability to afford cost of consulting doctors and bear cost of medicine. Many of them visit the quacks or consult the salesperson of the local pharmacy for medical prescription. Homeopathy, which is relatively cheaper, is relatively popular among

the slum dwellers. They visit hospitals and other private M.B.B.S. doctors only in case of emergency and when treatment of critical ailments is warranted;

6.2.3 Awareness about Mental Illness:

- Awareness about the causes, symptoms, treatment approaches and facilities for the mentally ill persons is very poor. Often there is a delay in seeking treatment. Thus the mentally ill are brought to the hospital years after the onset of illness, when already a major time had been wasted and social disabilities set in. Due to the misconceptions associated with mental illness, a large part of the population still resort to magico-religious treatment. Misconceptions mainly develop from their strong belief that 'illnesses are results of sins of past life';

- The community still believes that folk wisdom, ghosts and black magic has an important role as a causative agent of mental illness;

- It has been observed that a major part of community believe in religious healers. But when they do not get any positive result then they opt for medication. Sometimes both types of treatment run simultaneously. They claim that medication is expensive therefore it becomes difficult for them to continue. Mentally ill persons after opting for hospital treatment do not continue it regularly for long. The drop out rate is high among the poor people. Poverty is considered to be the prime reason for it.

6.2.4 Stigma Associated with Mental Illness:

- In most of the wards the local people have shown a positive attitude towards the mentally ill patients. This population mainly constitutes the youngsters. They said that they can even help the patients by providing basic amenities and they have no problem in accepting them when they come back after recovery. But there are some who said that it is not possible for the mentally ill patients to recover completely. Therefore a distance has to be maintained with them while interacting. As they can be arrogant and harmful any time.

- The family, to which the mentally ill patient belongs, becomes stigmatized in the society. People think twice before having any ties with that family. Particularly the society members are reluctant to get married with some one of that family and for that family members often try to hush up cases of mental illness in the family. When members of the family participate in social occasions they are discriminated;

- The community members mentioned that others look at these families either with pity or disrespect. Within the family these patients are taken care of mainly by the parents, but not much by the others. They opined that mentally ill members are unfit

to get married either psychologically or physically and therefore they should not get married until and unless they are fully cured.

6.3. Views of the Key Informants (Doctors and Health Workers) on Mental Illness:

- The interviews with the HHWs revealed that they have very vague concept about mental health issues. As about the symptoms of mental illness and disability, they did not have any definite understanding about the diseases. Nor they were acquainted with the name of the diseases;

- As about the causes of mental illness, HHWs mentioned that these were mostly *'hereditary'* and other factors like *'head injury'*, *'family disturbances'*, *'tensions'* etc. can cause mental diseases;

- Mentally ill persons do not get any treatment in the WHU as there is no scope for the same. Hence the patients in the WHU are generally referred to the local hospitals for further treatment. Consequently the HHWs do not get much scope to deal with the mentally ill patients;

- Doctors were aware of the symptoms of mental illness. The distinction between mental illness and disability was not clear to some of them;

- They informed that people often come with physical symptoms but many of them were suffering from some kind of mental illnesses;

- They find many mental patients report to WHU but they can not address their problems due to lack of infrastructure. Consequently the patients are referred to a Psychiatric Department of a Government Hospital;

- Poor economic condition and deeply ingrained faith of people on traditional healing process is a deterrent in treatment of mental illness through modern medical science. Drug default also is common among poor people;

- Regarding the role of the family for the management of the illness they said that "mentally ill persons are burden to their family. It is the duty of the counselors to make family members understand that like any other disease this illness can be cured through treatment";

- Both doctors and HHWs suggested that in-service training should be provided on mental illness so that they can do early diagnosis and refer them to hospitals. They also suggested for initiating community mental health care to spread awareness among people. They felt that it will create community's responsiveness to address mental health problems at the local level.

CHAPTER – VII

Conclusion and Recommendations

7.1 Conclusion:

Mental health programme in India is still in an embryonic stage. So there is an advantage for development of mental health in Kolkata as well. The programme is to emphasis on community based care and utilization of community resources and this could help us to avoid too much dependency on mental institutions.

Mental health is an important component of health and development of the human society. Despite various recommendations and policies, mental health services are poor. Various committees recommended policies to improve mental health care, but there is no proper data based on epidemiological survey. It is needless to mention that base-line survey is of immense importance for gathering epidemiological data and information system for development of mental health care.

Moreover, it was noticed that there was delay in implementing Mental Health Act. Though it was accepted by the Parliament in 1987, but became effective in 1993. So social scientists have to take the responsibility to influence government and health workers to realize the problems related to mental health in a better way. There had been no major research to find out how culture and religion influence mental illnesses and health.

Mental illness is a significant cause of disability in India, and for that the poor people living in the slums it is a curse to them and to the family members. This is because the problem had been largely ignored by the health policy makers. The impact of breakdown of traditional family due to urban migration, led to numerous adverse effects including mental illness and thus slum dwellers are worst affected. Thus it caused a greater impact on people's psycho-social health while people were busy for economic freedom.

It is also to be mentioned that various preventive measures and even curative and rehabilitative services provided are grossly inadequate in proportion to the estimated needs. The ward level facility for tackling the large-scale expansion of mental illness is a serious problem. The present NMHP lacks in-built mechanisms for community participation at the functional level. Several new issues like alcoholism, domestic violence, urbanization, growing problems of the elderly population, natural disaster, stress at work, migration, all have come up with major impact on mental health.

Kolkata as a cosmopolitan city has many problems along with an appalling mental health problem. Unfortunately, these issues related to mental health do not get much attention in the agenda of the government or private organizations. The number of doctors and nurses available for treatment of mentally challenged patients are grossly inadequate. Various hospitals do not have requisite supply of drugs for the mentally challenged patients.

The state does not have any policy guideline for ensuring proper treatment and rehabilitation of the mental patients. Medical Officers of WHU (Ward Health Units) are helpless to address the problems of mentally ill persons owing to lack of basic facilities for such treatment at the WHU level. As a result of such neglect and indifference, these hapless people either move around in the streets or are forced to stay within homes in a pitiable condition. They represent a 'culture of silence' having no power to exercise their rights and authority. Doomed with an uncertain future, they are either detained in large institutions, isolated from society and far from families and loved ones or face the brunt of social neglect and discrimination. They are often considered as society's burden and ridiculed as 'mad' or 'insane'.

Given the global context of human rights and growing concern for subaltern people, it is time now to provide these marginalized people best health care facilities by the state with greater vigor and warmth. Mental health professionals have a unique opportunity in this regard to develop broad based and complete mental health programme utilizing the current concept of mental health. This requires the professionals not only to accept work outside the institutions, but also beyond the needs of the ill persons. They have to consider the opportunities for prevention of mental disorders and promotion of mental health. This also requires a greater role of the non-medical mental health professionals for better utilization of social, economic and cultural resources in terms of beliefs, practices, and institutions like family and community groups. At the macro level, the Government needs to play a pro-active role to devise policies for treatment and rehabilitation, which contributes in decreasing mental morbidity and suffering.

7.2 Recommendations

On the basis of the findings of the survey following recommendations are made:

7.2.1 For Government:

- Government need to frame a Mental Health Policy for better treatment and rehabilitation of the mentally challenged people;
- Facilities for mental health care need to be introduced in all the WHU, so that people can access proper treatment, both immediate and long term;
- Since counseling and therapy are integral part of treatment of mental patients, appointment of clinical psychologists and psychological counselors are essential;
- Psychiatry should be given special emphasis in the medical courses so that doctors officers can easily deal with these cases; Right now the syllabus of MBBS deals with psychiatry in a trivial manner, so medicos also neglect the subject and thus have a weak conception on the subject;
- In service training should be provided to the General Practitioners on mental illness so that they can do early diagnosis and refer them to the hospitals;
- Training on mental health issues for the health workers/field workers of WHU, Anganwadi workers of ICDS, teachers need to be organized for early identification and treatment of mentally ill persons;
- WHU should have referral directory and should maintain liaison with other line departments;
- Initiating Community Mental Health Programme: Community Mental Health Programme is under operation in four districts of West Bengal. The programme should be introduced to other districts in West Bengal. Awareness and sensitization programmes should be organised regularly in the slums to wipe out their misnomer in the magico-religious treatment and also to educate them on signs and symptoms of mental illness. So that they can make an early identification by themselves. This will help in restructuring of their thought;
- Health Worker should regularly visit each and every household to make them aware about signs and symptoms of Mental Illness with the scientific treatment procedures;

- Introducing Mental Health Programmes in School**:** Mental health programme in schools will ensure early diagnosis of various mental and behavioural disorders among the children and timely referrals. This will ensure early recovery from various mental and behavioural disorder from which the children suffer;

- The Government needs to increase the beds in Mental Hospitals to accommodate more patients and also to set-up separate wards for rehabilitating them.

- Since the number of Doctors and Nurses available for treatment for mentally challenged persons are grossly inadequate, the State needs to make recruitment in these posts.

- Workshops and training programmes need to be organized for
  i) State level planners and administrators.
  ii) Mental Health professionals like Psychiatrists, Psychologists, Psychiatric Social Workers, Health workers and other voluntary workers interested in mental health care;

- Support materials like manuals for doctors and multi purpose workers, other IEC materials need to be developed keeping in mind the social, economic and religious background of the target group;

- The training of Anganwadi Workers under ICDS on mental health would facilitate early identification and referral of children with Mental Health Problems to the General Hospitals. The Anganwadi Workers can take a pivotal role to increase public awareness about Mental Health in the neighbourhood community.

7.2.3 For NGOs

- Regular awareness camps regarding the signs and symptoms of mental illness and mode of treatment should be organized where the doctors, psychologist and social workers will sensitize common people in easy language. Audio-visual aids may be used to create lasting impression among the people. Screening of films showing benefits of hospitalization would be more acceptable to the people;

- Some essential medicines can be distributed free of cost or at a lower cost to the mentally ill persons following doctor's prescriptions;

- NGOs need to facilitate the role of family for supporting the mentally ill patients as family always forms the main support system for them. But it is observed that these people are in many instances abandoned by their families which put them in deep water. On the other hand these patients become a stress for family members too.

Hence, the social workers need to provide supportive counselling to the families to make them realize that their assistance can go a long way for their recovery;

- Shelter homes with facilities need to be created for basic care and medications may for homeless and for those who are denied family care;

- Emergency Toll Free Helplines should be introduced for easy contacts during crisis;

- Identification of camps for detection of mentally ill persons needs to be organized in rural areas and in urban slums. Similar programme is run by Ministry of Social Justice & Empowerment, Govt. of India for detection of physical disability.

- Schools can be an important starting point for promotion of Mental Health. Mental health camps in schools will ensure early recognition of those who are handicapped with sensory and motor nervous systems. Thus they can use prosthetic devises to minimize handicaps and can prevent both cognitive underachievement and social mal-adjustment;

- Mental health programme in schools will also endow the teachers with necessary knowledge to identify children with sensory and motor handicaps or with mental health problems that had not been detected so far by the parents or health personnel;

- Self Help Groups organized by the NGOs can effectively reduce the chronic problems like alcohol dependence, increase financial ability of the challenged and can function as pressure group to policy change;

- NGOs need to facilitate interaction with the KMC and bureaucracy and other private service providers for convergence of action and facilitation of service delivery mechanism especially for the mentally ill persons through public consultation and networking with NGOs /CBOs; **(Annexure – XI: Ward wise list of NGOs / CBOs)**

- A 'Directory of Organisations' working in the areas of mental health may be brought out to facilitate inter-agency exchange mechanism, create platform for joint actions and advocacy. A network between Government and NGO's should be in place for referral services and also to explore availability of preventive and rehabilitative services for the mentally ill persons;

- Networking with Police, Railways, Education Department, Health Care Service providers and Media etc. is of immense importance for effective delivery of services;

- The Network body like NGOs Forum is the need of the hour to be formed to facilitate inter agency exchange/sharing of knowledge, experience and expertise. The forum needs a small secretariat for its sustenance;

- Among the slum dwellers use of drugs is a common phenomenon. There is virtually little or no expertise available in the area for them. NGOs need to refer addicts to de-addiction center and subsequently to halfway homes for proper treatment and care; **(Annexure – VII: List of Drug Counselling Centre in Kolkata)**

- Encouraging and establishing Public-Private-Partnerships for meeting the emergent needs of the mentally ill persons. Corporate sectors should be approached to provide technical and financial support.

Mental Illnesses are not a curse, they can be taken care of with affection and sincerity

No great genius has ever existed without some touch of madness. – Aristotle, *De Tranquillitate Animi (On Tranquility of Mind)*

Annexure – I

National Institute of mental health and neuro-sciences

COMMUNITY MENTAL HEALTH SERVICES
DEPARTMENT OF PSYCHIATRY
And
CENTRAL RELIEF COMMITTEE, BANGALORE

MENTAL HEALTH RECORD OF HOMELESS PERSONS

Record Number: ☐☐☐☐☐

1. Name: _____

2. Name of the Relative: _____

3. Name of the city/town/village: _____

4. Name of the post: _____

5. Name of the Taluk/Tehsil/Panchayat:_____

6. Name of the Police Station: _____

7. District: _____

8. State: _____

9. Location Residence: Rural / Urban: _____

10. Identification marks of the Resident

    1. _____
    2. _____

11. Date of first contact with the facility: ☐☐ ☐☐ ☐☐☐☐

12. Language Spoken: _____

13. Duration since being dislodged from the family ☐☐☐ months

14. Duration of stay in NPK ☐☐☐ months

15. Years of schooling/education ☐☐ years
    00 – illiterate

16. Marital Status ☐
    1 = Never married; 2 = Married; 3 = Separated; 4 = Divorced; 5 = Widowed

Annexure – I

17. Past Employment Status: ☐☐

01 = Agricultural laborer
02 = Self employed farmer
03 = Unskilled worker
04 = Street Vendor
05 = House wife
06 = Skilled worker
07 = Student
08 = Professional
09 = Retired
10 = Unemployed
11 = Begs for a living

18. Religion ☐
1 = Hindu; 2 = Muslims; 3 = Christians; 4 = Others

19. Availability of Relative ☐
1 = yes; 2 = no

20. Available address of the Relative:
_____

21. (a) Name: _____
Detailed address: _____
_____

21 (b) Name: _____
Detailed address: _____
_____

Symptom check list:

Code: 1 = Yes; 2 = Absent; 3 = Uncertain

(1) Ill Kempt ☐ 1

(2) Self neglect ☐ 2

(3) Confused* ☐ 3

(4) Agitated* ☐ 4

(5) Restless ☐ 5

Annexure – I

(6)	Uncooperative	☐	6
(7)	No eye contact	☐	7
(8)	Poor rapport	☐	8
(9)	Hostile*	☐	9
(10)	Excited	☐	10
(11)	Irritable	☐	11
(12)	Suspicious	☐	12
(13)	Mute*	☐	13
(14)	Catatonic*	☐	14
(15)	Minimal Communication	☐	15
(16)	Motor retardation	☐	16
(17)	Muttering to self	☐	17
(18)	Poor attention span	☐	18
(19)	Hallucinatory behavior	☐	19
(20)	Retarded Speech	☐	20
(21)	Rapid Speech	☐	21
(22)	Incoherent speech	☐	22
(23)	Poverty of content of speech	☐	23
(24)	Delusion of persecution	☐	24
(25)	Delusion of reference	☐	25
(26)	Grandiose Delusions	☐	26
(27)	Delusions of guilt	☐	27
(28)	Other Delusions	☐	28

(29)	Auditory Hallucinations	☐	29
(30)	Hallucinations in other modalities	☐	30
(31)	Blunt Affect	☐	31
(32)	Restricted affect	☐	32
(33)	Inappropriate affect	☐	33
(34)	Social withdrawal	☐	34
(35)	Emotional withdrawal	☐	35
(36)	Apathy	☐	36
(37)	Disinterest in the surrounding	☐	37
(38)	Hopelessness	☐	38
(39)	Worthlessness	☐	39
(40)	Suicidal Thoughts*	☐	40
(41)	Suicidal acts*	☐	41
(42)	Impaired Judgment	☐	42
(43)	Poor social sense	☐	43
(44)	Poor Communication skills	☐	44
(45)	Poor Social Skills	☐	45
(46)	Impaired self help skills	☐	46
(47)	Intellectual retardation	☐	47
(48)	Un-intelligible speech	☐	48
(49)	Impaired Memory	☐	49
(50)	Confabulation	☐	50
(51)	Perseveration	☐	51

(52) Any other symptoms ☐ 52

(53) Disorientation ☐ 53

(53) Alcohol abuse or substance abuse ☐ 54

(54) Features of Alcohol withdrawal ☐ 55

(55) Features of Drug withdrawal ☐ 56

(56) Lack of Insight ☐ 57

(57) Any other symptoms specify: _____

_____

_____

* Presence of any one of these factors needs referral to acute care facilities.

23. Physical Health ☐
1 = Normal; 2 = Abnormal

24. If abnormal specify nature of
Physical Health Problems: _____

25. Past Psychiatric treatment ☐
1 = Yes; 2 = No

26. Outcome of Evaluation of first contact ☐
1 = No Physical / Mental Abnormality
2 = Mental Health Problem
3 = Physical Health Problems
4 = Both mental and physical health problem

27. Physical Diagnosis ☐
1 = Yes; 2 = No; 3 = Uncertain

28. If yes, specify: _____

29. Psychiatric Diagnosis: ☐
1 = Yes; 2 = No; 3 = Uncertain

Annexure – I

30. If yes; First Diagnosis _____

Additional Diagnosis _____

31. Current level of Disability due to psychiatric condition

1 = No disability
2 = Mild disability
3 = Moderate disability
4 = Severe disability

32. Details of Current Treatment ☐

1 = Yes; 2 = No

33. Details of Current Treatment and dose of medication

Name of the Drug	**Dose in MGS Per Day**
Tab Chlopromazine	_____
Tab Trihexyphenidyl	_____
Tab Resperidone	_____
Inj Fluphenazine	_____
Tab Imipramine	_____
Tab Olanzepine	_____
Tab Clozapine	_____
Tab Ziprasidone	_____
Cap Fluoxetine	_____
Tab Haloperidol	_____
Inj Haloperidol	_____
Inj Flupenthixol	_____

DATE: **SIGNATURE OF THE DOCTOR:**

Annexure – II

Questionnaire for Follow Up of the Psychiatric Patients using primary care services

Record Number | | | | | |

Name of Patient: _____

Address:_____

_____

Age | | in years Gender 1= Male 2= Female | |

Date of First contact at _____ Clinic: .....

FOLLOW UP INFORMATION:

A. Contact with the patient: | |

1= Could meet the patient, 2= Could meet only family members, 3= Expired, 4=Migrated, 5= Missing, where about not known Left the place of residence/ Other.....

B. Current treatment status. | |

1. On regular treatment, 2. On irregular treatment, 3. No treatment

C. How is the psychiatric condition (since seen last) | |

1. Recovered completely, 2=Improved, 3= Worsened, 4= No change

D. Family type of the patient: | |

1=Nuclear, 2=Joint, 3=Extended, | |

Nuclear = Husband wife and children.

Joint = Husband, wife , children, parents and other significant relatives

Extended family= Husband, wife, children and other relatives

E. Current employment status (last 30 days):……

1= Employed, 2= Unemployed, 9= no information/not known

F. Reasons for discontinuation of treatment

Code 1=Yes 2=No

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**

1= Poverty, 2= Long distance, 3= Infrequent clinic days, 4= Got completely better / Complete recovery
5= Side effects of medication, 6= No change with treatment, 7=Taking treatment from an another centre
8= No one to accompany to the clinic, 9=We do not believe in the medicines for mental illness, 10= Clinic staff not cordial,
11= Cost of medicines, 12= Stigma / discrimination, 13= Services not responsive during crisis 14= others

G. Suggestions for improving the mental health services

Code 1=Yes 2=No

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**

1= Weekly clinic, 2= Free medicines, 3= Clinic to be closer to the place of residence, 4= Financial support
5= Employment support, 6= Dispensing medication at Home , 7= Admission facility in the local area 8= others

Annexure – II

H. Any other suggestions

_____
_____
_____
_____

Signature of the Health worker

Date of Visit

Annexure – III

National Institute of Mental Health and Neuro-Sciences
Department of psychiatry, NIMHANS

Knowledge, Attitude and Practice Questionnaire for Health Workers or Members of the Community

SL #	Item	Yes	No
1	Mental illness is curable		
2	Mentally ill individuals need support and care by the family		
3	Mental illness is due to evil spirit, black magic or wrath of Gods		
4.	Behavior disturbances seen in mentally ill persons are related to strange experiences and thinking disturbance consequent to neurochemical changes in the brain.		
5	Very effective and safe drugs are available to treat mental illness		
6	A diagnosis of mental illness is made based on history and mental state examination alone		
7	Mental disorders are inherited		
8	Strange or altered behavior seen in mental illness is related to strange experiences and disordered thinking. These can be rectified by administered of medications, which alters the neuro-chemical abnormalities in the brain.		
9	Disability and Chronicity seen in mentally ill persons is the result of lack of mental health care		
10	Mentally ill people are understood as strange because internal experiences in the person is ununderstanbale to the onlooker		
11	Mental ill individuals can have strange experiences like hallucinations and false firm beliefs like delusions		
12	Mentally ill persons should be brought under care proactively by health care staff or the family members or any member from the community after early identification.		
13	The only way to convince the community that mentally can recover and function normally is by initiating treatment as early as possible		
14	Psychotic symptoms like hallucination and delusions, depressive symptoms like sad mood and disinterest can be controlled within three months if treated early.		
15	2 out of every 1000 population are likely to suffer from schizophrenia a type of severe mental illness.		
16.	2 out of every 1000 population are like to suffer from mood disorders		
17	10 out of every 1000 individuals are likely to suffer from periodic attacks of epileptic fits/seizures		
18	Tubectomised women and vasectomised men complain of ill-defined bodily complaints because surgical procedure causes weakness in them.		
19.	Mental retardation can be prevented by providing good health care		
20	Epilepsy and mental retardation are often referred to as poverty related disorders		

Annexure – III

21.	Epileptic fits can be controlled by taking medication regularly.		
22.	Anti-epileptic drugs can be stopped after two years of fit free period in majority of patients		
23.	One very simple way of managing mental retardation at home is by giving vitamins and tonics very early in infancy		
24	Mental retardation is a permanent disability		
25	Effective management of mental retardation can occur only if the condition is identified early in infancy or childhood		
26	With respect to mentally ill persons resuming routines like – working, cooking, shopping, reading, and socialization should be started as early as it is possible after initiation of treatment		
27	Rehabilitation of mentally ill person cannot be done at home or using resources in the village		
28	Mentally ill person can be best helped by getting them married		
29.	Maintenance anti-psychotics can be administered by health workers / ANMs in the patients house		
30	Sensory and motor skills can be achieved by starting simple oil massage followed by hot water both every day till the child is mobile.		
31	Addiction is an anti-social behavior, therefore punishment and imprisonment is the best intervention for such individuals		
32	The best first aid for epileptics fits is to turn the patient to one side and loosen his/her clothes		
33	Health workers can educate families to involve their mentally kith and kin in work related or socializing activities by developing activity scheduling		
35	If psychotic patients refuse to eat food or drink water, it is best to ignore such patients		
36	Risk of relapse of mental illness is high in patients who abuse drugs like cannabis or amphetamines		
37	Hostile, critical and over involved families do good to mentally ill patients		
38	Health workers are expected to identify mentally ill, educate their families, refer such patients to the primary health centers and follow up patients regularly		
39	Acutely disturbed and uncooperative patients should be shifted to the nearest hospital as early as possible by using light physical restraints		
40	Very well educated and intelligent people can develop mental illness		

Annexure – IV

Semi Structured Interview Schedule for the Health Practitioners of Ward Health Centres under KMC

Objectives:

- To know about the knowledge and attitude of health practitioners towards mental illness.
- To get a view of interventions provided to mentally ill patients in the WHUs.
- To record suggestions regarding introductions/ modification of treatment for mentally ill patients.

Statements:

1. Do you think mentally ill people are difficult to deal with? If yes, why?
2. Mental illnesses are not curable. What are your views?
3. Mentally ill patients are curse to their families. Do you agree?
4. Is their any difference between mental illness and disability?
5. Inattention to mental health can worsen the scenario. How?
6. General practitioners are not well equipped to deal with mental illness. If yes, then in terms of what?
7. If the infrastructure of your health centre does not allow you to intervene a mentally ill patient, then what will be your mode of action?
8. Do you think family has a role to play in the treatment procedure of mentally ill patients? if yes, then what?
9. Do you think community should have some awareness about mental illness? What would be the role of General Practitioners in this regard?
10. Please give some suggestions regarding the treatment of mentally ill people in WHU.

Annexure - IX

List of thickly populated wards under KMC as per Percentage

Sl. No.	% of Slum Population	Ward No.
1	60.01 and above	6
2	60.01 and above	3
3	60.01 and above	13
4	60.01 and above	14
5	60.01 and above	29
6	60.01 and above	28
7	60.01 and above	36
8	60.01 and above	56
9	60.01 and above	59
10	60.01 and above	65
11	60.01 and above	66
12	60.01 and above	67
13	60.01 and above	58
14	60.01 and above	57
15	60.01 and above	75
16	60.01 and above	79
17	60.01 and above	137
18	60.01 and above	133
19	60.01 and above	134
20	60.01 and above	135
21	60.01 and above	136

Population wise thickly populated slum wards under KMC

Sl. No.	Slum Population	Ward No.
1	75001 to 90000	59
2	75001 to 90000	65
3	75001 to 90000	66
4	50001 to 75000	58
5	50001 to 75000	1
6	50001 to 75000	6
7	50001 to 75000	3
8	25001 to 50000	57
9	25001 to 50000	2
10	25001 to 50000	4
11	25001 to 50000	14
12	25001 to 50000	28
13	25001 to 50000	29
14	25001 to 50000	56
15	25001 to 50000	78
16	25001 to 50000	79
17	25001 to 50000	134
18	25001 to 50000	135

Annexure – V

National Institute of Mental Health and Neurosciences
Department of psychiatry, NIMHANS

Knowledge Attitude and Practice Questionnaire for Medical Officers

SL #	Item	Yes	No
1	Person with mental disorders do not come to see general practitioners or primary care physicians		
2	Mentally ill persons are very dangerous and mental hospital is the appropriate place to treat them		
3	Many healthy people come to the primary care hospital or GP clinic to waste the doctors' time.		
4.	Many of the patients who present with ill defined bodily complaints have emotional problems		
5	Mentally ill individuals are unlikely to recover with treatment and therefore they should be left alone		
6	Hallucinations, delusions, disorganized thinking and lack of insight are features of psychosis		
7	Emotionally strong people do not develop mental illness		
8	Very intelligent individuals are liable to develop mental disorders		
9	Mental disorders are treatable		
10	Mental illness is the result of black magic and evil spirits		
11	Clinical depression is brain disorder. It is characterized by morbid sadness, lack interest, decreased energy, motor retardation and biological function disturbance		
12	2 out every 1000 individuals suffer from schizophrenia		
13	10 out every 1000 persons are known to have mental retardation.		
14	1 out of every four persons attending primary care facility have one of more diagnosable mental disorders		
15	Children are too young to develop mental health problems		
16.	Persons who attempt suicide do so because of mental disorders		
17	Addiction to drug is a anti-social behavior		
18	Once an addict is always a addict		
19.	To a large extent mental retardation can be prevented by providing good antenatal care, nutrition and safe delivery		
20	Minor mental health problems or neurosis can be very effectively managed with minor tranquilizers .		
21.	Lack of time, large number of out patients, lack of mental health skills are some of the common reasons associated with inability to integrate mental health care into general health care		
22.	It is myth to presume that primary care doctors can provide mental health care in primary care settings		
23.	10 out every 1000 people suffer from epilepsy in the community		
24	Most of the patients with clinical depression present to primary care settings with depressed and suicidal ideas.		

Annexure – V

25	Mental health problems take a long time for evaluation and diagnosis and therefore such problems cannot be handled in primary care or GP settings		
26	Counseling means advice		
27	Effective management of person with emotional distress is likely to reduce the incidence of chronic physical health problems in the long run		
28	Psychotic symptoms remit because drugs ensures adequate sleep		
29.	Hyper-dopaminergic state characterizes psychotic disorder.		
30	Depressive disorders are associated with decreased serotonin in certain areas of the brain.		
31	Most often acute dystonia is a very fatal side effect that follows anti-psychotic drug use.		
32	Feedback, Reassurance, linking between symptoms and stress, problems solving and coping strategies are very effective psychological interventions that can be used in primary care settings.		
33	Memory loss or forgetfulness is always due excessive masturbation.		
35	Suicidal patients should be persuaded not to carry out self-destructive acts.		
36	Treatment of the mentally ill by traditional healers and faith should be strongly discouraged.		
37	Mentally ill person can recover with early identification and treatment.		
38	Persons with psychosis need only drug treatment to remain well all through their life.		
39	Visual hallucination is pathognomonic of organic psychosis.		
40	Inattention to mental health needs of the community worsens poverty.		

Annexure – VI

List of Key Persons Interviewed: (KII):

Sl. No.	Ward No.	Doctor's Name	Designation
1.	82	Dr. Soumen Majumder	Medical Officer
2.		Rabindra Barik	Field Worker
3.		Sekh Moni	Field Worker
4.		Buddhadev Sarkar	Field Worker
5.		Bimal Bera	Field Worker
6.	78	Dr. Parimal Seal	Medical Officer
7.		A.S Bagchi	Pharmacist
8.		Rekha Bhattacherjee	Field Worker
9.		Sikha Das	Field Worker
10.		Asma Khatun	Field Worker
11.	29	Dr. Sandipta Sinha	Medical Officer
12.		Bibha Malakar	Field Worker
13.		Ratna Dey	Field Worker
14.		Lalmohan Jha	Pharmacist
15.	3	Dr. Biswajit Chatterjee	Medical Officer
16.		Sandhya Das	Field Worker
17.		Tapan Majumder	Health Sarkar, Bailiff
18.	54	Dr. Indrajit Dey	Medical Officer
19.		Ms. Shanti Chowdhury	Health Sarkar
20.		Mr. Sandip Sengupta	Field Worker

Annexure – VII

List of Drug Counselling Centres in Kolkata

Name of the Organisation	Address of the Organisation
Human Development & Research Institute (HDRI)	45, Baniatola Lane, Kolkata-9
Vivekananda Education Society (VES)	13/3 Kalicharan Dutta Road, Kolkata-
Drive for United Victory over Addiction (DUVA)	71/C Diamond Harbour Road, Kolkata-34
Women Coordinating Council (WCC)	5/1, Red Cross Place, Kolkata-1

Annexure – VIII

The Table below Enumerates the Representative Sample and its Size.

Ward/ GP (1)	Name of Street / Slum (2)	Types of Slums (3)	Population (4)	Estimated No. of HH (5)	ni=Ni/N * 100 (6)	Slum population (household) (As per Census 2001) (7)	Population (as per Census, 2001) (8)
108	Nonadanga	Unauthorised	2997	600	60	2618 (581)	38338
84	Gurudwara and Hazra	Unauthorised	4217	843	84	4185 (607)	23400
88	Sabuj Sangatha	Authorized	12442	2488	249	12464 (2702)	27050
3	**Belgachia (J.K Ghosh Rd)**	**Authorized**	**32869**	**6574**	**657**	**32875 (6027)**	**53299**
6	**Chitput Strand Bank Road**	**Unauthorised**	**38910**	**7782**	**778**	**38876 (6964)**	**48096**
20	**Strand Bank Road**	**Unauthorised**	**2668**	**534**	**53**	**2667 (514)**	**47327**
29	**Narkeldanga**	**Authorized**	**46251**	**9250**	**925**	**46320 (7357)**	**46887**
32	**Basanti Colony**	**Unauthorised**	**17113**	**3423**	**342**	**17096 (3432)**	**46081**
39	Marques Sq	Authorized	13838	2768	277	13840 (2030)	28255
58	**Gobindo Pathik Road**	**Unauthorised**	**86605**	**17321**	**1732**	**86361 (16237)**	**86487**
Podra	Podra	N.A.	18000	3600	360		16810
Pachpara	Pachpara	N.A.	16697	3339	333		15072
80	**Jackson Durgapur**	**Both Authorised and Unauthorised**	**3710**	**742**	**74**	**3725 (671)**	**38587**
83	Kalighat	Authorised	6574	1315	132	6564 (1326)	24381
61	Banderpatti	Authorised	9828	1966	197	8317 (1446)	
61	Bedford Lane	Authorised	9000	1800	180	8317 (1446)	34128
85	Panditia	Authorised	5360	1072	107	10997 (2241)	31231
82	**Chetla**	**Unauthorised**	**12438**	**2488**	**249**	**12443 (2912)**	**43347**
86	Gariahat	Unauthorised	3930	786	79	3935 (771)	25148
115	Kabardanga		2500	500	50		30616
75	Watganj, Commissariat Rd	Authorized	2000	400	40	16360(3392)	24392
75	Canal Rd, Hastings		1300	260	26		
77	**M.M Ali Road**	**Authorised**	**6000**	**1200**	**120**	**17413 (3118)**	**44071**
78	**Mominpur**	**Authorised**	**6000**	**1200**	**120**	**33638 (6066)**	**58930**
78	**Mayurbhanj Rd**		**1100**	**220**	**22**		
79	**Bhukailash**	**Authorised**	**1300**	**260**	**26**	**30120 (6129)**	**42229**

Annexure – VIII

Ward/ GP (1)	Name of Street / Slum (2)	Types of Slums (3)	Population (4)	Estimated No. of HH (5)	ni=Ni/N * 100 (6)	Slum population (household) (As per Census 2001) (7)	Population (as per Census, 2001) (8)
	Rd						
80	**Alif Nagar**	**Authorised**	**3000**	**600**	**60**	**3725 (671)**	**38587**
80	**GCD Sick Line, Brook Line**		**3000**	**600**	**60**		
39	Shalimar (Balurghat)	Unauthorized	8672	1734	173	8680 (1906)	28255
Total Population		**378319**	**378319**	**75664**	**7565**	**413219**	**941004**

Annexure – X

NGOs Working in the field of Mental Health

Sl. No	Name of the Organization	Contact Details of the Organization
1.	Baul Mon Society	34, Central Road, Jadavpur, Kolkata-700023 **Phone No.:** 033 2412 4629/0713
2.	Mon Foundation	Nazrul Islam sarani, Kaikhali, Kolkata-700052 **Phone No.:** 033 25005887
3.	Sevac	135A, Diamond Harbour Road, Poda Aswathtala Kolkata-700063 **Phone No:** 033 2497 1890
4.	Purbasa	South View Nursing Home, 11 Satyan Roy Road, Behala Kolkata-700034, **Phone No:** 033 24476504/ 24672180/ 24782387
5	Ment Aid	17A, Brojen Mukherjee Road, Behala, Kolkata-34 Ph No. 033-2478-9510
6.	Pavlov Medical Research Centre	98, Mahatma Gandhi Road
7.	Diksha	Akash Kusum, Ground Floor, 37 Jheel Road Kolkata: 700031, **Mobile:** 9831104051
8	Anjali	93/2, Kakulia Road, Benubon Kolkata- 700029, **Mobile :** 9831123981
9.	National Institute Of Behavioural Sciences(NIBS)	7,CIT Road(Above Senco Mega Shop) Moulali, Kolkata- 700014 **Phone No:** 033 2286 5203
10.	Sanlap	Counselling Unit, 38B, Mahanirban Road, Kolkata-700029 **Phone No:** 033 2464 9596
11.	Turning Point	27A, Jadavpur East Road, Jadavpur, Kolkata: 700032 **Phone No-** 033 2412 3660, **Mobile:** 98300 69106
12.	Sahamarmi	98 Karaya Road, Karaya Estate, Flat No: D/12 Kolkata-700019, **Phone No:** 033 3290 6538
13.	Samikshani	37, Southend Park, Kolkata- 700029 **Phone No:** 033 2466 3504
14.	Paripurnata	1912, Panchasayar Road, Kolkata-700094 **Phone No:** 033 6417 0302
15.	IPER	P/39/1, Prince Anwar Shah Road, CIT Scheme 114A, Kolkata-700045, **Phone No:** 033 2417 6991
16.	DANA	53/C, Motilal Nehru Road, Kolkata-700029 **Phone No:** 033 2454 4298

Annexure – X

Sl. No	Name of the Organization	Contact Details of the Organization
17.	Indian Psychiatry Society	1/1, Gobra Road, Kolkata-700014
18.	Disari	City Health @ Welfare Association, 14, Parsibagan Lane Kolkata-700009, **Phone No:** 033 2350 3075/2483
19.	Alzheimer's And Related Disorders Society of India	15/3C,Naskar Para, Dhakuria, Kolkata-700031 **Mobile:** 9331039839
20.	Indian Association of Private Psychiatry	1/1, Gobra Road, Kolkata-700014
21.	Setu	C/O Soumitra Basu, ARGHYA, Garia Garden Kolkata-700084, **Phone No:** 033 2435 1499
22.	Sruti Disability Rights Centre	5A,R.K Ghosal Road, Kolkata-700042 **Phone No:** 033 2442 1494
23.	Iswar Sankalpa	24A, Iswar Ganguly Street, Kolkata-700026 **Mobile:** 9830260089
24	Vivek Chetna	2/3A, Keyatala Road, Kolkata-29, Tel no. 2464-4114
25	ANTARA	P.O. Gobindpur, South 24 Parganas, Pin – 743353. **Phone No.:** 033-2437-0593/8383
26	Alakendu Bodh Niketan (Residential)	P-1/4/1, CIT Scheme, VII – M, VIP Road, Kankurgachi, Kolkata – 700054. **Phone No.:** 033 2337-7433

Annexure – XI

WARDWISE LIST OF NGOs / CBOs

Sl No	Ward-3	Ward-29	Ward-78	Ward-82	Ward-54
1.	Three Star Sports Club **Add-**34,Belgachia Road, Kol-27	Noori Masjid **Add-**16, Chamru Singh Lane, Kol-11	Young Men's Athletic club(Secty.Md. Irfan) **Add-**2/1 Nawab Ali Lane,Kol-23	Sree Ramkrishna Mandap **Add-**Paramhansa Deb Lane,Kol-27	KMC Health Centre: Borough-6: Ward-54 Add-3, G.C. Bose Road, Kolkata – 700014
2.	Shree Shree Gauiya Bharat Ashram **Add-**N/1 Krishna Mullick Lane.Kol-37	Basti Welfare Society **Add-**5/1 Kasai Bastee 1st lane,Kol-11	Bustee Local Committee & Social Welfare **Add-**39,Mominpore Road, Kol-23	Sabuj Sangha/Blue Star **Add-**Chetla Road, kol-27	Help Age India Add-162/B, A.J.C. Bose Road, 4th Floor, Kolkata – 700014
3.	Dakhindari Young Star Social Welfare Organisation **Add-**D.K.D Rly Colony, Belgachia. Kol-37	Basti Development Committee **Add-**4a Kasai Bastee 2nd lane Kol-11	Young Boys Association **Add-6**,Rajab Ali Lane Kol-23	Sabuj Sathi Sangha **Add-**12/1, Chetla Road,Kol-27	Raja Ram Mohan Roy Society Add-24, Girish Ch. Bose Road, 3rd Floor, Kolkata – 700014
4.	Shanhati Club Belgachia,Kol-34	Young Society **Add-**55, Narkeldanga North Road, Kol-11	New India Chruch Of God **Add-**16/A MayurBhanja Road Kol-23	Rupantar Sangha **Add-**80/1, Chetla Road,Kol-27	N.I.B.S (Mental Health) Add-P-7, C.I.T. Road, Scheme-IV, 1st Floor, Kolkata – 700014
5	Kheyali Sangha **Add-**70, Kundu lane, Kol-37	Masjid **Add-**Do	Indian sporting Club **Add-**12/1 Mayurbhanja Road Kol-23	Chetla New Star **Add-**1/1 Sankar Bose Road,Kol-27	The Salvation Army Clinic Counselling and Advice for AIDS Add-172, A.J.C. Bose Road, Kolkata – 700014
6.	Ekta Sporting Club **Add-**67/ABCD Belgachia Road, Kol-37	Dawn Sports Club **Add-**59,Narkeldanga North Road,Kol-11	Welfare Athletic Club **Add-**13/H Braunfield Road, Kol-23	Netaji sangha **Add-**80/1, Chetla Road Kol-27	Nawjawan Society Add-43, Ismail Street, Kolkata – 700014

Annexure – XI

Sl No	Ward-3	Ward-29	Ward-78	Ward-82	Ward-54
7.	Duttabagan shishu Mahal **Add-**4/1, Jiban Krishna Mitra Road	Narkel Danga young Association **Add-**64, Narkeldanga North Road Kol-11	Mominpore Social United Club **Add-**30,Braunfield Road, Kol-23	Nirmal Smriti Sangha **Add-**Mahesh Chandra Dutta Lane	Entally Morning Athletic Club Add-73/1, Dr. Suresh Sarkar Road, Kolkata – 700014
8	Kishore Sangha **Add-**Birpara Lane	Friends Club **Add-**Sashtitala Road, Kol-11	**NGO**-Right Track **Add-**15/2 Braunfield Kol-23	Rajib Smriti Sangha **Add-**Rakhal Dus Auddy Road	Young United Society Add-Padda Pukur, Kolkata – 700014
9.	Birpara Youth Kayar Club **Add-**7 Birpara lane, Kol-37	Yubak Sangha **Add-**6/4 Motilal Sen Lane,Kol-11		**NGO-** Help Age India **Add-**Paramhansa Deb Lane,Kol-27	Entally Baptist Church Add-85, Dr. Suresh Sarkar Road, Kolkata – 700014
10.		Prabhati Athletic Club **Add-**118/6 Narkeldanga main Road Kol-11			Friends Sports Club Add-30/H/1, Dr. Suresh Sarkar Road, Kolkata – 700014
11.		Chhatra sammilani Sangha **Add-**15/14 Narkeldanga North Road,Kol-11			Sahayata (Family Counselling Centre) Add-162B, A.J.C. Bose Road, Flat No. 203, 4th Floor, Kolkata – 700014
12.		Ashim Smriti Sangha **Add-**6/B/2 Motilal Sen Street			Baptist Girls High School Add-84, Dr. Suresh Sarkar Road, Kol–14
13.					Carey High School Add-85, Dr. S. S. Road, Kolkata – 14
14.					The Frank Anthony Public School Add-32/2B, Beniapukur Lane, Kolkata – 700014

Annexure – XI

Sl No	Ward-3	Ward-29	Ward-78	Ward-82	Ward-54
15.					Beacon English School Add-46, Sir Syed Ahmed Road, Kol-14
16.					Sree Sarada Vidyalaya Add-C-10, Dr. S. S. Road, Kolkata – 14

Annexure - XII

General Health Question (GHQ) Score:

Patient Sl. No	Total Score				
	Ward No. 3	Ward No. 29	Ward No. 54	Ward No. 78	Ward No. 82
1	5	5	3	8	2
2	9	5	5	3	3
3	8	7	0	3	6
4	5	12	11	3	7
5	10	5	11	3	8
6	12	7	11	3	8
7	9	9	4	4	8
8	8	5	7	4	9
9	10	11	5	8	2
10	8	10	5	8	3
11	5	9	2	8	3
12	8	5	4	8	8
13	7	12	3	8	8
14	8	6	5	8	8
15	10	10	7	9	5
16	9	6	12	9	6
17	6	5	4	9	7
18	11	7	12	9	8
19	8	8	5	9	8
20	9	5	8	9	9
21	8	2	6	9	9
22	8	12	4	10	7
23	8	8	5	10	8
24	6	5	8	10	8
25	7	9	10	10	9
26	9	6	1	11	7
27	9	3	7	11	9
28	9	10	2	11	9
29	3	3	6	11	2
30	3	12	7	11	3
31	5	6	0	8	9
32	6	9	6	4	7
33	2	4	11	9	3
34	4	5	0	5	8
35	7	4	9	4	7
36	6	5	8	8	4
37	5	8	11	11	8
38	8	7	7	4	11

Annexure - XII

Patient Sl. No	Total Score				
	Ward No. 3	Ward No. 29	Ward No. 54	Ward No. 78	Ward No. 82
39	3	6	6	7	5
40	6	6	3	8	7
41	3	9	7	5	3
42	7	8	4	4	3
43	4	10	10	6	6
44	6	9	2	7	2
45	4	5	9	3	12
46	5	10	5	8	4
47	4	4	6	4	8
48	5	4	7	6	2
49	5	2	9	7	7
50	4	8		2	5
51		7		8	3
52		11			4
53		6			3
54		5			5
55		8			3
56		5			3
57		6			
58		3			
59		4			
60		2			
61		6			
62		4			
63		9			
64		2			
65		4			
66		5			
67		1			
68		5			
69		5			
70		4			
71		7			

Annexure – XIII

Table of WHO DAS II (Ward-3):

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
1	19	13	8	10	34	27	111
2	18	14	9	9	34	29	113
3	7	8	5	5	22	15	62
4	14	7	7	5	21	16	70
5	8	6	4	5	16	12	51
6	11	8	5	4	17	16	61
7	8	6	4	5	16	12	51
8	11	10	4	9	19	15	68
9	12	9	6	6	20	18	71
10	12	10	7	6	24	17	76
11	8	6	6	5	16	12	53
12	17	13	8	8	30	27	103
13	10	6	6	6	14	12	54
14	12	7	6	7	20	18	70
15	12	9	6	7	19	18	71
16	9	6	6	5	14	14	54
17	10	6	6	5	16	14	57
18	10	5	5	9	10	13	52
19	18	11	9	10	31	28	107
20	15	8	5	12	31	24	95
21	18	11	8	10	20	28	95
22	9	5	6	10	17	13	60
23	14	9	8	7	29	26	93
24	9	5	5	8	17	16	60
25	18	14	7	9	33	26	107
26	9	9	3	10	17	15	63
27	9	7	5	7	22	21	71
28	10	6	5	8	17	15	61
29	17	14	9	8	32	28	108
30	13	9	15	8	17	20	82
31	19	13	9	10	33	27	111
32	10	7	5	10	17	16	65
33	17	14	10	7	31	29	108
34	10	9	5	10	20	17	71

Annexure – XIII

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
35	19	14	10	9	30	29	111
36	7	6	3	7	12	14	49
37	10	5	3	7	12	14	51
38	17	13	9	7	28	21	95
39	10	7	5	6	14	14	56
40	17	13	7	6	25	14	82
41	16	12	6	8	24	24	90
42	10	9	8	5	17	16	65
43	10	7	6	9	17	21	70
44	16	13	9	8	29	24	99
45	10	7	5	6	14	14	56
46	9	8	7	6	19	15	64
47	20	14	9	10	32	28	113
48	17	11	8	8	28	26	98
49	12	9	6	6	22	18	73
50	18	14	7	6	26	27	98
51	12	9	5	8	18	18	70
52	7	6	7	5	22	12	59
53	16	8	5	6	15	12	62
54	12	8	6	7	20	19	72
55	15	10	6	6	20	18	75
56	9	9	5	6	18	19	66
57	12	9	5	6	18	18	68
58	16	14	9	13	30	28	110
59	12	9	5	8	20	15	69
60	17	14	8	9	31	26	105
61	13	9	5	8	20	18	73
62	16	16	9	10	33	28	112
63	10	7	5	6	15	13	56
64	10	8	7	6	12	13	56
65	8	6	5	6	15	12	52
66	8	6	5	5	16	15	55
67	16	12	6	9	26	24	93
68	11	7	4	7	17	17	63
69	13	9	5	8	23	23	81
70	10	5	5	6	15	15	56

Annexure – XIII

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
71	16	12	6	8	22	19	83
72	10	8	5	6	24	20	73
73	18	14	8	9	32	25	106
74	12	8	5	5	18	17	65
75	19	13	9	9	32	28	110
76	9	6	5	5	22	16	63
77	20	15	9	10	34	29	117
78	10	8	5	6	20	14	63
79	12	25	7	8	26	18	96
80	17	12	10	13	32	29	113
81	13	9	6	8	26	18	80
82	15	14	9	10	34	25	107
83	13	8	8	10	24	20	83
84	17	14	9	8	32	27	107
85	16	6	8	12	28	27	97
86	11	8	7	6	22	17	71
87	17	11	18	12	30	24	112
88	9	9	4	5	15	12	54
89	16	12	8	13	28	24	101
90	19	14	10	9	34	28	114
91	20	12	8	12	36	40	128
92	12	10	7	6	23	18	76
93	20	15	10	15	34	30	124
94	13	9	6	13	26	24	91
95	9	7	4	4	19	15	58
96	10	8	6	7	22	13	66
97	13	12	4	12	28	18	87
98	12	9	8	8	23	22	82
99	10	6	5	5	20	16	62
100	16	12	7	12	20	24	91
101	9	7	5	4	19	17	61
102	18	13	9	8	34	27	109
103	16	12	8	12	12	24	84
104	13	10	7	7	27	22	86
105	16	12	8	12	34	24	106
106	17	13	9	8	21	20	88

Annexure – XIII

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
107	12	9	6	9	25	18	79
108	17	11	9	9	33	27	106
109	16	12	8	12	25	24	97
110	19	13	5	14	34	30	115
111	20	13	8	15	34	30	120
112	18	15	10	15	34	30	122
113	16	12	10	15	34	30	117
114	12	7	4	7	30	29	89
115	12	9	8	12	21	21	83
116	19	9	6	15	34	28	111
117	14	12	8	13	28	24	99
118	14	13	5	11	29	25	97
119	16	12	8	11	30	24	101
120	18	10	6	13	34	30	111
121	14	12	6	11	28	25	96
122	19	12	5	15	34	30	115
123	16	13	5	13	31	20	98
124	20	10	6	15	34	30	115
125	9	9	7	9	26	20	80
126	19	15	8	15	34	30	121
127	16	9	8	12	26	30	101
128	12	8	5	5	19	17	66
129	16	12	8	13	28	24	101
130	10	7	7	6	18	16	64
131	11	9	6	9	24	22	81
132	9	10	4	7	21	20	71
133	16	12	8	12	26	20	94
134	11	6	4	6	16	13	56
135	16	15	8	9	34	30	112
136	17	11	9	13	29	25	104
137	13	9	4	6	16	18	66
138	19	13	8	10	29	31	110
139	6	8	6	9	28	24	81
140	21	12	8	8	32	26	107
141	10	10	4	6	28	22	80
142	9	6	6	5	21	13	60

Annexure – XIII

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
143	12	12	4	7	28	21	84
144	13	7	5	6	17	15	63
145	13	6	8	9	26	21	83
146	11	9	5	5	21	15	66
147	7	5	5	6	17	16	56
148	20	15	10	15	34	30	124
149	13	7	6	6	22	23	77
150	20	15	10	15	34	30	124
151	11	7	7	5	16	13	59
152	20	15	10	15	34	30	124
153	17	13	8	13	30	24	105
154	16	12	8	12	34	24	106
155	10	8	5	11	26	19	79
156	7	4	2	4	24	13	54
157	10	3	2	11	25	22	73
158	20	15	8	15	34	30	122
159	8	12	5	11	28	16	80
160	16	12	5	11	33	24	101
161	20	15	8	12	30	24	109
162	14	6	4	11	28	20	83
163	16	12	6	13	24	24	95
164	6	6	8	9	22	23	74
165	12	9	6	12	28	15	82
166	10	4	2	8	17	13	54
167	12	3	6	13	28	21	83
168	10	7	4	6	21	19	67
169	8	9	6	12	23	20	78
170	18	10	6	13	34	30	111
171	18	16	6	10	34	20	104
172	14	7	6	13	26	22	88
173	10	7	4	10	22	20	73
174	12	7	4	10	27	24	84
175	14	10	5	11	33	27	100
176	12	7	4	10	21	19	73
177	15	12	4	11	27	21	90
178	16	7	4	13	34	30	104

Annexure – XIII

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
179	18	14	6	13	34	30	115
180	16	10	6	12	32	30	106
181	16	14	4	12	32	27	105
182	10	5	3	6	20	17	61
183	11	7	4	7	19	23	71
184	17	8	6	14	29	30	104
185	12	7	4	8	22	23	76
186	12	6	4	8	23	20	73
187	15	8	7	6	20	14	70
188	20	9	7	15	23	24	98
189	20	15	8	15	30	30	118
190	20	15	7	15	30	30	117
191	20	14	8	15	30	29	116
192	16	12	7	13	24	27	99
193	20	12	7	12	29	30	110
194	20	12	7	12	25	25	101
195	16	9	7	12	24	25	93
196	15	12	8	14	27	25	101
197	20	15	9	15	30	29	118
198	15	9	5	9	19	23	80
199	18	15	9	14	27	26	109
200	19	14	9	14	26	29	111
201	19	12	9	15	26	25	106
202	18	12	8	14	26	24	102
203	19	15	10	15	26	28	113
204	16	12	7	15	24	24	98
205	20	15	9	15	26	28	113
206	20	12	8	12	24	28	104
207	20	12	8	12	28	24	104
208	20	14	10	15	29	29	117
209	20	15	10	15	29	30	119
210	20	12	10	15	30	29	116
211	19	15	9	15	29	26	113
212	18	13	9	15	28	28	111
213	18	14	10	15	26	28	111
214	20	15	9	15	28	30	117

Annexure – XIII

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
215	18	14	10	15	29	25	111
216	19	14	10	15	28	26	112
217	20	14	10	15	30	30	119
218	17	12	10	13	27	28	107
219	20	13	10	15	30	29	117
220	18	13	8	15	28	29	111
221	13	12	8	14	25	26	98
222	18	13	10	13	27	29	110
223	17	13	9	13	26	26	104
224	20	13	10	14	23	26	106
225	18	12	9	14	29	26	108
226	18	14	8	15	25	21	101
227	17	10	7	11	27	27	99
228	17	13	9	13	27	26	105
229	19	14	7	12	24	21	97
230	17	12	8	13	27	25	102
231	17	14	9	14	29	27	110
232	19	13	10	12	25	26	105
233	19	13	10	13	28	26	109
234	18	14	9	13	26	25	105
235	18	12	8	14	26	29	107
236	18	12	8	12	26	25	101
237	14	11	7	12	25	26	95
238	16	12	7	12	25	24	96
239	12	9	6	12	18	19	76
240	17	12	10	13	24	26	102
241	19	12	8	12	25	29	105
242	19	15	9	14	26	26	109

Annexure – XIII

Table of WHO DAS II (Ward-29):

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
1	9	6	4	4	15	14	52
2	9	5	4	9	19	14	60
3	8	6	6	4	14	14	52
4	7s	12	4	7	30	13	73
5	12	9	6	7	15	12	61
6	6	8	3	5	17	13	52
7	9	6	6	4	14	13	52
8	13	7	4	9	22	24	79
9	13	9	6	8	26	16	78
10	18	10	5	11	33	30	107
11	14	9	6	11	26	20	86
12	17	9	6	14	33	30	109
13	18	13	6	12	20	18	87
14	18	11	6	11	34	30	110
15	14	9	6	9	26	15	79
16	15	10	6	12	33	29	105
17	14	11	6	11	26	20	88
18	13	11	7	13	30	21	95
19	18	11	6	13	26	21	95
20	12	9	5	9	21	20	76
21	15	11	6	10	26	19	87
22	14	10	5	8	21	23	81
23	15	9	6	9	28	21	88
24	17	15	8	14	34	30	118
25	18	10	6	12	26	22	94
26	18	15	8	15	34	30	120
27	13	11	6	11	26	23	90
28	13	15	5	11	32	24	100
29	7	6	4	4	15	13	49
30	14	10	6	11	27	24	92
31	6	6	4	4	16	12	48
32	14	10	6	13	30	24	97
33	5	6	4	3	12	11	41
34	5	10	5	11	33	27	91
35	5	6	4	3	12	11	41

Annexure – XIII

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
36	5	6	4	4	10	12	41
37	18	10	6	13	34	27	108
38	8	6	4	4	16	13	51
39	15	12	6	13	31	27	104
40	12	9	6	5	20	16	68
41	15	12	6	13	33	28	107
42	12	9	6	5	17	13	62
43	10	7	4	8	24	22	75
44	12	9	6	4	16	12	59
45	14	10	6	11	32	23	96
46	12	9	6	8	9	18	62
47	15	11	5	13	23	30	97
48	18	13	8	13	31	22	105
49	15	10	6	11	32	30	104
50	10	9	6	7	14	18	64
51	19	10	6	14	34	30	113
52	13	9	7	11	26	20	86
53	19	13	6	13	34	30	115
54	19	14	8	13	34	25	113
55	16	9	5	12	29	23	94
56	10	9	6	5	14	16	60
57	10	15	4	9	22	22	82
58	20	15	8	13	34	30	120
59	11	5	4	7	22	20	69
60	11	9	6	6	14	15	61
61	8	3	4	4	17	14	50
62	6	12	7	11	28	24	88
63	14	9	5	11	23	21	83
64	20	15	9	13	34	30	121
65	7	6	4	5	14	12	48
66	8	6	4	5	14	12	49
67	19	14	8	10	32	28	111
68	20	15	8	13	34	30	120
69	14	11	7	11	31	18	92
70	18	13	8	11	33	26	109
71	18	12	4	7	27	22	90

Annexure – XIII

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
72	10	7	5	8	20	14	64
73	13	7	4	9	25	17	75
74	9	7	5	8	20	14	63
75	13	10	5	11	25	18	82
76	12	7	4	11	21	18	73
77	12	10	5	7	27	18	79
78	14	9	4	8	24	23	82
79	15	12	8	8	26	25	94
80	10	7	4	8	21	19	69
81	16	11	8	12	26	24	97
82	14	10	4	8	23	22	81
83	13	9	6	9	20	17	74
84	12	9	6	9	22	18	76
85	12	8	5	6	20	18	69
86	12	9	6	8	20	18	73
87	19	15	9	10	32	30	115
88	16	12	7	11	24	20	90
89	17	12	6	8	20	19	82
90	8	6	6	6	16	13	55
91	12	7	6	6	20	18	69
92	12	9	6	6	20	18	71
93	12	9	6	6	20	18	71
94	12	9	6	5	20	18	70
95	16	12	8	8	26	26	96
96	10	9	6	5	16	13	59
97	9	6	4	4	15	12	50
98	10	6	6	4	14	14	54
99	10	8	6	8	13	13	58
100	8	6	4	4	15	14	51
101	10	7	5	5	14	12	53
102	20	15	10	15	32	30	122
103	12	9	5	9	20	14	69
104	16	12	7	8	28	19	90
105	12	9	7	9	20	17	74
106	12	9	6	6	22	20	75
107	16	12	7	8	26	24	93

Annexure – XIII

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
108	13	10	7	8	26	24	88
109	11	9	6	8	18	19	71
110	13	9	6	6	21	18	73
111	16	12	8	11	26	24	97
112	13	9	6	9	20	18	75
113	16	10	6	6	24	19	81
114	18	13	7	16	31	29	114
115	13	10	7	8	26	22	86
116	20	15	8	13	34	30	120
117	12	9	6	8	20	18	73
118	17	13	7	11	30	19	97
119	16	14	8	8	26	20	92
120	13	12	7	8	20	17	77
121	18	14	9	9	32	30	112
122	13	9	6	7	17	12	64
123	14	7	6	6	20	15	68
124	10	6	5	7	15	12	55
125	20	15	10	10	32	29	116
126	10	10	6	10	26	20	82
127	20	15	10	10	32	30	117
128	17	13	7	11	29	25	102
129	10	6	6	5	14	12	53
130	14	10	7	10	27	20	88
131	10	9	6	7	17	12	61
132	11	6	5	8	26	14	70
133	8	6	4	5	16	13	52
134	11	7	5	7	18	12	60
135	6	6	4	5	18	12	51
136	10	8	6	7	16	12	59
137	10	6	6	5	16	15	58
138	5	4	4	5	13	10	41
139	16	12	7	11	26	24	96
140	6	6	4	5	16	12	49
141	14	12	7	11	25	24	93
142	10	9	6	5	19	15	64
143	12	9	6	9	22	18	76

Annexure – XIII

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
144	5	6	4	5	16	13	49
145	13	9	4	4	22	17	69
146	8	6	4	5	16	12	51
147	11	7	4	7	17	18	64
148	10	9	6	6	18	16	65
149	14	10	4	7	26	16	77
150	10	9	6	5	19	12	61
151	14	11	5	7	24	16	77
152	8	6	4	5	15	12	50
153	12	9	6	9	20	18	74
154	8	6	4	5	16	12	51
155	10	6	5	7	17	8	53
156	5	4	4	5	24	12	54
157	9	6	4	7	22	12	60
158	10	9	6	8	16	12	61
159	9	6	5	7	15	12	54
160	14	9	5	9	20	10	67
161	18	11	8	11	28	24	100
162	13	9	5	9	24	20	80
163	16	12	7	11	28	24	98
164	14	9	5	9	28	16	81
165	20	15	8	13	34	30	120
166	10	9	5	10	26	16	76
167	20	15	8	13	32	30	118
168	12	7	5	9	30	15	78
169	18	13	8	13	32	25	109
170	12	8	4	9	29	16	78
171	10	9	5	8	20	16	68
172	11	7	5	7	18	16	64
173	17	8	6	11	24	16	82
174	12	10	6	8	25	24	85
175	14	7	5	10	30	16	82
176	18	12	8	10	23	22	93
177	11	7	5	9	23	15	70
178	14	12	8	11	25	26	96
179	14	9	6	10	30	18	87

Annexure – XIII

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
180	19	14	10	10	30	24	107
181	15	9	4	11	30	28	97
182	15	10	7	8	20	19	79
183	17	8	5	11	30	24	95
184	13	7	5	6	20	16	67
185	17	7	5	9	30	27	95
186	12	8	5	6	21	13	65
187	10	7	5	10	32	15	79
188	10	7	5	6	17	12	57
189	12	7	7	12	23	16	77
190	16	10	5	11	25	20	87
191	9	6	7	11	27	20	80
192	14	10	7	11	29	20	91
193	10	4	4	5	15	7	45
194	8	6	6	5	14	12	51
195	8	6	5	7	13	8	47
196	8	6	5	7	17	12	55
197	11	8	4	8	25	22	78
198	12	11	4	12	27	23	89
199	19	10	6	14	33	30	112
200	20	15	7	15	33	30	120

Table on WHO DAS II (Ward-78):

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
1	12	9	4	4	21	17	67
2	11	7	5	6	18	12	59
3	11	7	6	5	19	18	66
4	11	4	4	6	18	12	55
5	11	6	6	5	20	17	65
6	20	15	10	13	34	30	122
7	8	6	6	4	14	13	51

Annexure – XIII

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
8	15	7	7	11	24	18	82
9	8	6	4	3	14	12	47
10	13	6	6	8	21	20	74
11	11	6	6	4	16	14	57
12	14	10	7	11	22	16	80
13	8	6	4	4	14	13	49
14	19	11	6	13	31	24	104
15	6	6	4	4	12	12	44
16	20	15	8	13	34	30	120
17	8	6	4	4	14	13	49
18	20	15	8	13	34	30	120
19	9	6	6	4	19	13	57
20	17	10	6	10	29	23	95
21	9	7	6	4	14	13	53
22	9	7	5	7	21	15	64
23	10	8	4	4	16	14	56
24	10	8	6	7	24	15	70
25	10	7	4	5	15	13	54
26	14	10	6	11	24	17	82
27	10	8	6	9	24	15	72
28	9	6	5	7	22	16	65
29	10	9	3	10	20	16	68
30	10	6	3	5	18	11	53
31	14	7	5	10	20	21	77
32	20	11	6	13	34	30	114
33	14	7	6	8	14	16	65
34	20	15	8	13	34	30	120
35	14	7	5	8	20	16	70
36	20	15	7	13	34	30	119
37	14	8	5	10	23	16	76
38	20	14	7	13	34	30	118
39	14	7	6	7	27	16	77
40	15	8	7	7	27	23	87
41	13	10	6	9	23	21	82
42	8	6	4	4	17	12	51
43	10	7	6	6	20	24	73
44	12	9	6	6	22	12	67

Annexure – XIII

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
45	12	9	5	6	18	18	68
46	10	6	4	4	15	14	53
47	20	15	8	11	30	30	114
48	8	6	6	4	18	13	55
49	15	14	7	13	28	20	97
50	12	9	6	5	20	17	69
51	12	9	6	9	22	18	76
52	8	6	4	4	16	12	50
53	20	15	8	13	34	21	111
54	8	6	6	5	16	13	54
55	16	12	7	6	25	24	90
56	7	6	4	4	16	13	50
57	12	8	6	6	18	17	67
58	7	6	4	4	16	13	50
59	20	12	10	15	27	25	109
60	9	9	6	4	18	14	60
61	10	9	6	7	18	18	68
62	12	9	6	5	20	17	69
63	13	8	5	8	22	18	74
64	8	6	5	5	16	13	53
65	20	12	6	14	25	30	107
66	17	12	7	12	30	29	107
67	12	9	4	9	24	20	78
68	10	7	4	6	19	21	67
69	17	10	5	10	33	26	101
70	11	7	4	8	21	18	69
71	19	13	7	15	31	28	113
72	19	12	6	15	32	28	112
73	17	11	5	12	29	26	100
74	14	7	3	8	23	21	76
75	19	13	8	15	32	28	115
76	18	12	8	14	34	30	116
77	18	12	7	14	34	25	110
78	16	9	6	14	26	22	93
79	20	15	8	15	30	30	118
80	9	5	5	8	27	15	69
81	12	9	5	6	23	22	77

Annexure – XIII

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
82	13	10	7	5	20	18	73
83	12	9	6	6	20	24	77
84	14	10	5	6	26	24	85
85	11	9	5	5	18	18	66
86	11	7	5	8	17	18	66
87	19	14	6	7	21	16	83
88	12	7	5	9	21	13	67
89	14	12	7	8	26	22	89
90	20	14	8	10	32	29	113
91	16	10	8	7	26	22	89
92	11	9	7	6	14	20	67
93	12	9	4	5	18	19	67
94	15	11	8	7	29	28	98
95	16	12	6	8	26	24	92
96	17	13	8	8	30	23	99
97	16	11	8	8	31	24	98
98	11	7	5	6	18	24	71
99	12	8	5	4	16	13	58
100	12	8	5	5	21	18	69
101	15	14	8	8	26	23	94
102	9	7	5	6	22	13	62
103	11	9	5	6	20	13	64
104	19	15	8	10	32	30	114
105	12	10	6	6	20	22	76
106	13	9	7	6	26	23	84
107	20	15	8	10	29	29	111
108	11	12	6	6	22	17	74
109	11	10	6	6	19	18	70
110	13	10	4	11	14	24	76
111	13	9	7	9	11	24	73
112	6	4	3	7	8	14	42
113	19	6	3	13	28	28	97
114	20	6	5	11	30	29	101
115	14	8	7	11	14	17	71
116	20	10	7	13	34	30	114
117	20	6	7	15	30	30	108
118	7	6	3	5	14	25	60

Annexure – XIII

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
119	12	6	7	10	27	17	79
120	9	4	3	6	10	14	46
121	6	3	3	5	10	14	41
122	6	5	3	5	13	11	43
123	12	6	3	8	14	17	60
124	14	7	5	10	25	22	83
125	20	7	5	9	28	27	96
126	14	6	5	9	23	18	75
127	12	7	5	8	24	16	72
128	11	8	5	7	22	17	70
129	13	6	5	8	17	16	65
130	8	6	7	7	14	15	57
131	14	5	6	10	20	16	71
132	10	7	3	8	23	22	73
133	19	12	7	10	30	25	103
134	13	8	7	6	26	21	81
135	16	9	6	9	23	22	85
136	17	12	9	13	29	25	105
137	10	9	5	7	23	21	75
138	12	9	7	6	23	20	77
139	12	7	6	6	18	18	67
140	11	8	7	8	25	20	79
141	17	12	7	8	30	19	93
142	15	12	6	6	25	24	88
143	14	8	5	6	21	17	71
144	12	10	8	7	26	21	84
145	10	8	5	8	19	21	71
146	12	9	6	9	20	19	75
147	15	10	5	8	20	18	76
148	13	8	9	8	23	19	80
149	14	11	8	5	20	21	79
150	12	7	7	6	22	21	75
151	14	6	5	6	21	17	69
152	11	10	7	6	19	19	72
153	11	8	6	6	19	18	68
154	9	3	5	7	17	8	49
155	16	10	6	7	25	16	80

Annexure – XIII

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
156	14	9	7	4	25	21	80
157	12	9	7	11	23	19	81
158	13	7	5	7	25	21	78
159	18	13	7	9	28	21	96
160	9	6	5	6	20	13	59
161	10	6	4	8	15	10	53
162	16	13	7	15	33	30	114
163	18	10	6	13	32	19	98
164	14	7	4	8	23	20	76
165	15	10	5	9	23	19	81
167	12	10	5	9	20	19	75
168	13	9	5	9	21	19	76
169	20	15	9	15	32	30	121
170	13	12	8	10	22	22	87
171	17	9	6	15	34	23	104
172	16	9	5	9	22	19	80
173	14	7	4	8	24	23	80
174	20	15	9	10	34	22	110
175	8	4	3	7	14	15	51
176	6	12	4	7	24	15	68
177	9	3	2	10	22	13	59
178	6	7	2	7	22	14	58
179	8	3	6	7	19	9	52
180	6	12	5	13	25	14	75
181	6	4	5	5	23	16	59
182	6	12	4	5	21	23	71
183	7	5	2	9	18	17	58
184	13	7	4	10	26	21	81
185	20	15	7	15	34	27	118
186	15	8	4	9	28	23	87
187	10	3	2	7	17	16	55
188	7	12	2	9	19	15	64
189	9	5	2	8	20	15	59
190	11	7	2	10	22	18	70
191	9	4	5	8	17	9	52
192	8	4	2	11	13	10	48
193	20	15	8	14	32	30	119

Annexure – XIII

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
194	10	6	2	4	19	12	53
195	14	10	5	7	25	19	80
196	13	6	6	10	25	18	78
197	12	7	4	7	21	20	71
198	14	12	6	7	21	22	82
199	12	10	7	7	23	18	77
200	11	8	4	6	16	15	60

Table of WHO DAS II (Ward-82)

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
1	19	11	7	13	30	29	109
2	13	10	7	9	27	22	88
3	10	8	5	7	18	15	63
4	16	9	7	13	33	27	105
5	7	3	2	4	15	8	39
6	4	3	2	2	10	12	33
7	7	3	2	6	14	12	44
8	9	15	2	6	20	7	59
9	14	15	6	6	19	12	72
10	7	5	2	3	13	12	42
11	12	6	6	11	23	20	78
12	13	12	5	12	24	24	90
13	11	8	6	8	17	18	68
14	10	7	6	8	16	17	64
15	20	15	7	11	34	22	109
16	15	10	7	11	25	17	85
17	20	15	6	11	32	30	114
18	10	3	2	4	17	13	49
19	5	3	2	4	16	15	45
20	16	10	8	12	28	25	99
21	5	3	2	4	15	15	44
22	8	6	6	4	15	12	51

Annexure – XIII

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
23	10	9	6	5	21	17	68
24	12	9	6	6	22	16	71
25	9	6	6	4	16	13	54
26	9	6	5	4	17	13	54
27	8	5	6	4	16	13	52
28	8	6	6	4	16	13	53
29	11	8	6	4	19	15	63
30	8	5	2	2	14	16	47
31	10	7	5	6	16	19	63
32	12	11	8	6	18	17	72
33	15	8	7	10	20	24	84
34	8	7	7	6	14	10	52
35	12	9	8	6	18	18	71
36	12	6	5	6	16	13	58
37	12	9	6	7	18	21	73
38	13	9	6	8	20	23	79
39	13	9	5	7	25	14	73
40	13	8	6	6	18	17	68
41	20	15	6	11	34	30	116
42	19	25	9	12	30	26	121
43	20	15	6	11	34	30	116
44	9	7	5	6	18	18	63
45	20	15	10	11	32	30	118
46	11	9	4	7	19	15	65
47	20	12	8	10	31	22	103
48	13	8	7	6	20	18	72
49	20	15	10	11	31	30	117
50	11	9	6	5	21	13	65
51	8	6	6	5	15	12	52
52	18	9	6	7	28	27	95
53	15	10	7	10	27	23	92
54	10	6	6	5	16	14	57
55	20	15	6	11	34	30	116
56	11	8	5	6	22	22	74
57	9	6	6	5	15	12	53
58	13	6	7	10	27	24	87
59	12	6	5	6	16	13	58

Annexure – XIII

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
60	12	6	6	5	16	15	60
61	8	6	4	5	16	12	51
62	16	10	7	7	20	17	77
63	12	9	6	6	20	17	70
64	29	14	8	9	34	24	118
65	8	7	6	5	15	12	53
66	19	13	8	10	28	25	103
67	7	6	5	4	13	12	47
68	13	8	6	6	22	16	71
69	15	9	7	8	22	19	80
70	15	8	5	10	22	21	81
71	19	7	7	11	26	21	91
72	6	5	4	6	16	17	54
73	12	11	6	8	12	26	75
74	9	7	3	11	15	21	66
75	14	8	6	10	25	23	86
76	20	10	7	11	30	29	107
77	18	11	6	10	26	25	96
78	12	4	6	11	15	21	69
79	11	6	6	11	19	23	76
80	11	11	6	11	18	18	75
81	19	8	6	11	26	28	98
82	8	3	2	5	4	6	28
83	10	8	6	5	22	20	71
84	13	8	4	7	23	19	74
85	13	10	6	6	20	18	73
86	15	10	6	6	22	19	78
87	12	5	5	6	15	15	58
88	4	3	2	6	13	7	35
89	6	3	2	3	11	15	40
90	4	3	2	3	11	9	32
91	6	3	4	2	11	11	37
92	4	3	6	4	10	7	34
93	4	3	2	2	8	5	24
94	6	3	2	2	11	4	28
95	9	3	2	4	12	4	34
96	15	7	5	6	23	26	82

Annexure – XIII

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
97	9	7	5	6	20	17	64
98	19	11	7	10	32	27	106
99	15	30	8	8	20	23	104
100	25	14	7	10	33	26	115
101	16	10	7	8	16	18	75
102	19	25	9	9	32	24	118
103	8	3	4	4	13	11	43
104	10	8	6	5	19	14	62
105	9	6	4	4	17	14	54
106	9	7	4	4	17	13	54
107	9	6	6	8	20	15	64
108	9	7	6	5	20	13	60
109	9	6	6	6	22	13	62
110	10	8	6	4	19	13	60
111	19	9	6	8	17	14	73
112	9	9	6	5	19	14	62
113	7	9	6	5	16	12	55
114	10	8	6	6	18	13	61
115	9	6	6	5	16	12	54
116	8	6	6	4	16	12	52
117	8	6	6	4	16	13	53
118	8	9	6	4	16	13	56
119	7	6	6	4	16	13	52
120	8	9	6	5	16	16	60
121	20	15	6	11	34	30	116
122	14	7	3	9	22	15	70
123	15	10	7	9	27	21	89
124	11	7	5	8	23	16	70
125	19	12	8	7	31	24	101
126	20	15	7	11	33	30	116
127	18	11	6	10	29	25	99
128	19	11	5	11	34	30	110
129	12	9	5	7	26	18	77
130	20	15	10	11	34	30	120
131	14	13	7	11	24	22	91
132	20	14	6	10	34	26	110
133	20	15	9	10	34	30	118

Annexure – XIII

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
134	15	8	6	11	31	23	94
135	12	9	9	7	23	18	78
136	13	7	5	7	23	17	72
137	20	15	8	11	34	30	118
138	16	12	6	15	29	28	106
139	17	11	7	11	34	27	107
140	6	3	2	2	20	15	48
141	20	15	10	15	34	30	124
142	9	6	4	6	18	12	55
143	9	9	3	6	18	14	59
144	13	6	7	10	25	24	85
145	6	3	5	4	10	13	41
146	6	3	2	2	16	13	42
147	5	3	2	2	13	13	38
148	17	9	4	8	22	19	79
149	6	3	2	2	13	12	38
150	12	4	2	6	20	15	59
151	7	3	2	4	15	14	45
152	7	3	2	3	12	13	40
153	6	3	2	2	16	9	38
154	8	5	2	5	10	9	39
155	7	3	2	3	18	13	46
156	7	8	3	6	23	16	63
157	6	3	3	3	18	19	52
158	16	6	3	14	26	20	85
159	16	13	7	8	24	21	89
160	13	8	5	6	22	16	70
161	18	14	8	9	34	28	111
162	15	8	5	6	12	15	61
163	9	8	6	4	12	17	56
164	13	8	6	6	17	14	64
165	11	8	6	6	22	19	72
166	15	12	7	7	21	20	82
167	18	13	9	9	30	29	108
168	9	6	4	8	20	20	67
169	15	9	6	9	24	20	83
170	10	7	5	5	14	14	55

Annexure – XIII

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
171	9	8	5	14	12	13	61
172	16	9	6	14	30	24	99
173	17	12	7	14	28	28	106
174	17	10	7	12	29	22	97
175	18	8	9	11	30	28	104
176	14	13	5	11	17	23	83
177	10	10	4	11	8	18	61
178	9	4	3	6	11	14	47
179	20	12	9	13	30	29	113
180	18	12	7	12	28	24	101
181	14	10	7	12	13	19	75
182	14	10	7	11	32	20	94
183	13	10	4	11	10	24	72
184	10	9	6	8	8	20	61
185	8	3	3	6	11	17	48
186	10	6	4	8	14	17	59
187	12	5	3	12	25	28	85
188	19	10	6	12	30	22	99
189	18	11	7	10	15	21	82
190	14	11	5	11	27	21	89
191	14	11	5	11	24	20	85
192	14	11	7	11	26	23	92
193	9	8	5	7	18	14	61
194	9	5	5	10	19	14	62
195	10	8	5	11	18	15	67
196	13	10	6	11	23	14	77
197	12	9	6	8	16	12	63
198	8	6	4	4	16	12	50
199	12	7	4	4	16	12	55
200	11	5	6	4	14	12	52
201	10	8	4	4	15	15	56
202	9	6	6	4	15	13	53

Annexure – XIII

Table on WHO DAS II (Ward-54):

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
1	18	15	3	13	24	18	91
2	9	7	2	5	16	24	63
3	16	3	3	5	19	7	53
4	20	15	4	12	26	11	88
5	13	15	6	7	21	8	70
6	8	3	2	3	8	10	34
7	16	13	6	12	24	8	79
8	14	3	3	6	14	11	51
9	9	4	2	4	15	11	45
10	10	7	2	6	12	13	50
11	4	3	2	3	12	5	29
12	18	15	10	9	27	13	92
13	16	12	10	8	24	15	85
14	8	6	2	5	8	10	39
15	5	10	4	4	15	25	63
16	8	3	2	3	14	5	35
17	11	6	5	6	12	13	53
18	18	10	4	8	25	6	71
19	7	3	2	4	8	7	31
20	11	3	4	8	12	7	45
21	4	3	2	2	6	10	27
22	10	3	4	5	14	8	44
23	10	6	6	11	17	27	77
24	9	8	4	10	16	15	62
25	17	9	5	13	27	17	88
26	16	10	9	11	22	22	90
27	15	10	6	11	21	26	89
28	12	7	6	10	20	17	72
29	9	7	4	9	14	17	60
30	9	8	4	9	16	16	62
31	14	12	6	11	24	16	83
32	9	8	6	9	18	19	69
33	11	9	6	10	19	18	73
34	12	7	4	8	20	16	67
35	19	11	8	13	29	28	108

Annexure – XIII

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
36	19	10	8	12	30	30	109
37	10	11	6	9	14	21	71
38	17	8	8	12	30	28	103
39	20	9	9	11	26	28	103
40	9	5	5	10	16	19	64
41	12	7	7	11	19	21	77
42	14	6	4	9	14	19	66
43	18	5	9	14	32	27	105
44	16	6	7	11	25	16	81
45	9	4	2	5	16	12	48
46	20	15	6	11	34	30	116
47	18	11	7	10	29	24	99
48	15	11	6	9	31	21	93
49	20	15	10	11	34	25	115
50	20	15	7	11	34	30	117
51	20	15	10	11	34	30	120
52	18	11	8	9	34	30	110
53	20	9	8	12	34	30	113
54	18	11	9	12	34	30	114
55	19	15	9	14	30	29	116
56	19	7	8	12	28	29	103
57	19	9	8	11	28	29	104
58	19	15	8	11	27	27	107
59	19	13	9	12	29	30	112
60	20	10	5	11	28	30	104
61	18	12	7	14	27	25	103
62	20	15	9	14	18	23	99
63	14	12	8	11	24	27	96
64	20	15	7	13	29	25	109
65	15	12	8	11	24	22	92
66	14	9	7	13	25	30	98
67	8	6	4	5	16	12	51
68	8	6	4	8	15	13	54
69	7	3	4	9	14	12	49
70	8	6	4	10	16	13	57
71	6	6	4	8	15	12	51
72	17	12	5	10	30	25	99

Annexure – XIII

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
73	15	11	3	8	27	23	87
74	20	12	7	15	29	29	112
75	18	12	8	14	29	27	108
76	15	9	6	11	23	23	87
77	12	9	6	15	26	18	86
78	18	12	7	14	29	25	105
79	20	15	10	15	27	30	117
80	6	7	3	5	14	13	48
81	17	9	7	12	22	21	88
82	17	11	7	10	21	24	90
83	18	15	8	14	34	24	113
84	17	15	7	15	29	22	105
85	13	9	7	13	24	22	88
86	18	12	7	14	25	24	100
87	20	10	7	14	33	28	112
88	14	10	6	15	21	19	85
89	20	10	8	15	33	30	116
90	12	11	6	11	22	22	84
91	7	5	2	4	15	12	45
92	10	6	4	6	18	16	60
93	16	12	6	13	24	18	89
94	8	7	4	9	14	13	55
95	19	15	9	11	33	33	120
96	15	12	7	12	27	24	97
97	18	11	3	7	23	19	81
98	13	6	3	8	29	25	84
99	17	11	5	8	27	24	92
100	10	4	8	5	17	12	56
101	13	11	4	8	24	22	82
102	7	5	9	8	21	15	65
103	19	15	10	14	30	29	117
104	7	10	4	9	14	17	61
105	19	7	8	14	30	22	100
106	14	10	8	13	30	17	92
107	20	15	10	15	34	30	124
108	20	13	8	15	29	30	115
109	20	13	8	15	27	30	113

Annexure – XIII

Respondent	DOMAINS						
	Understanding & Communicating	Getting around	Self Care	Getting along with people	Life Activities	Participation in society	Total
110	17	7	8	13	29	26	100
111	9	9	3	7	22	15	65
112	6	5	4	4	13	12	44
113	12	8	3	3	14	10	50
114	12	8	6	7	26	23	82
115	20	15	7	11	34	30	117
116	7	6	4	3	11	12	43
117	8	6	4	4	17	12	51
118	8	6	4	3	12	13	46
119	19	10	9	9	28	20	95
120	20	14	10	11	34	30	119
121	20	15	9	11	34	30	119
122	17	11	6	8	33	23	98
123	18	14	7	9	30	24	102
124	20	15	10	11	34	30	120
125	17	9	4	7	26	17	80
126	20	9	8	9	33	30	109
127	20	15	6	11	34	28	114
128	20	15	6	8	33	29	111
129	20	13	5	10	34	30	112
130	20	15	10	11	34	30	120